Percussive Notes

The journal of the Percussive Arts Society • Vol. 46, No. 2 • April 2008

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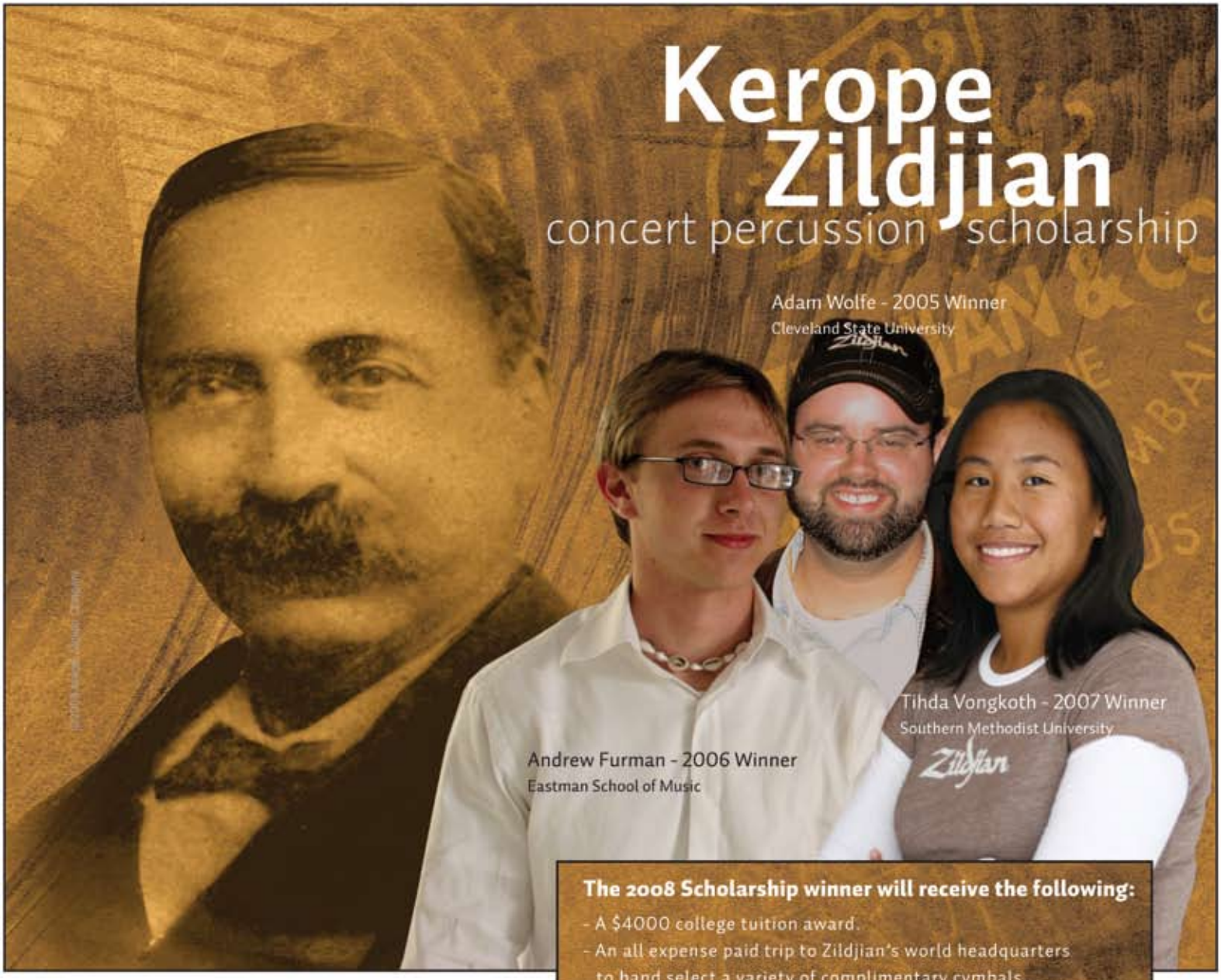
Having a Blast!

From Paradiddle-Diddles to Swing . Structure in 'The King of Denmark' . Music Therapy for Percussionists

Kerope Zildjian

concert percussion scholarship



The 2008 Scholarship winner will receive the following:

- A $4000 college tuition award.
- An all expense paid trip to Zildjian's world headquarters to hand select a variety of complimentary cymbals.
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For more information go to zildjian.com/givingback
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Kerope Zildjian Scholarship
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22 Longwater Drive, Norwell, MA 02061

Application Deadline
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Winner will be notified by
August 8th 2008

A Message from Craigie Zildjian:

The Zildjian family is pleased to announce the fourth annual Kerope Zildjian Scholarship. This scholarship recognizes an outstanding percussionist, who is currently enrolled in an undergraduate music program.

At the same time, the family welcomes the opportunity to pay tribute to Kerope, who presided over one of the most storied periods in Zildjian history. From 1865 until his death in 1909 in Constantinople, Kerope continued to develop the classic K. Zildjian sound, coveted by the world's greatest percussionists. In memory of Kerope's deep commitment to the art of craftsmanship, this scholarship, bearing his name, encourages and rewards percussionists in their pursuit of performing excellence.

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Cover photo by Joan Marcus

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Nathaniel Bartlett: Modern Marimba[3] Combining marimba and computer-generated sounds, page 14

Ron Vaughn, a Percussion Entrepreneur, page 60

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From the President

Giving Back to Our Community

By Gary Cook

For my April message, I would like to further my focus on volunteerism and update you on two recent committee chair appointments, inform you of a wonderful new resource that was *volunteered* to PAS, and refer you to two online resources for leaders—both current and future—in the society.

COMMITTEE CHAIRS

PAS committee chair vacancies were posted in early 2008 for the Education and International Committees. Following the process I outlined in the February *PN*, I interviewed applicants and reappointed Dr. Paul Buyer Chair of the PAS Education Committee and appointed Fernando Hashimoto new Chair of the PAS International Committee.

Buyer is Director of Percussion and administrator in the Department of Music at Clemson University in South Carolina. He was appointed Chair of the Education Committee in 2005 by PAS President Rich Holly and has done an excellent job working with that committee. Paul is well known to PAS members as frequent author of excellent articles in PAS publications, as an outstanding educator, and through his work at Clemson. We appreciate Paul's enthusiasm for continuing for a second three-year term as Chair of this committee and look forward to his continued fine work.

Hashimoto is familiar to readers of my *From the President* messages through my citing his many volunteer contributions to PAS, as well as through his work as an international performer and educator. Fernando is Professor of Percussion at São Paulo State University and is currently completing his doctorate at City University of New York as a Fulbright Scholar. Fernando has demonstrated outstanding leadership in PAS as the PAS Brazil Chapter President from 2000–05, winning the Outstanding Chapter President Award in 2002, and, he was the recipient of the PAS Outstanding Service Award in 2007. Fernando follows Frederic Macarez as Chair of the International Committee. Many thanks to Frederic for his term of fine leadership with the committee. Fernando's vision for the committee and organizational and communication plans are certain to accomplish many fine objectives with the committee and further promote quality percussion and PAS around the world.

We sincerely thank Paul and Fernando for their desire to volunteer their time, energy, and expertise to PAS in these important leadership positions and congratulate them on their appointments.

PERCUSSION BIBLIOGRAPHY

By the time this issue of *Notes* is published, PAS will have available online a valuable new resource *volunteered* to the society by Jeremy Craycraft. Jeremy "out of the blue" contacted PAS Vice-President Lisa Rogers and Graphic Designer Hillary Henry and offered his bibliography listing of percussion theses, dissertations, and research documents for posting on the PAS Website in the Online Research Journal.

Jeremy is an adjunct music instructor at the College of St. Scholastica, an independent private college in northeastern Minnesota. Previously, Jeremy was a Senior Lecturer and Percussion Instructor at the University of Wisconsin-Superior. Jeremy is a Doctoral candidate at the University of Cincinnati-College Conservatory of Music (CCM). During his residency, Jeremy performed as soloist with the CCM Wind Symphony and CCM Chamber Players and with the acclaimed Cincinnati Percussion Group. He is also very active performing as timpanist and percussionist in regional orchestras around the Midwest. Jeremy's dissertation research and work at CCM is on the percussion music of William "Bill" Russell.


Gary Cook

Jeremy's bibliography started out from his own research into "what had come before." His bibliography, in his own words, "attempts to create a listing of percussion research documents from 1900 to present. Each document listed was written in fulfillment of graduate degree requirements—master's degree or doctoral degree—from a higher education institution. Original compositions were not included in this listing (unless pedagogy is the implied focus). Recitals that were referenced in online databases and given in lieu of a document for a master's degree and/or doctoral degree were not included unless a guide for composition, performance, and/or significant program notes were available."

Jeremy has volunteered his services to keep the bibliography updated by collecting more listings and/or additions/corrections from the PAS membership and posting them approximately every two to three months. For more information on this incredibly valuable resource,

PERCUSSIVE ARTS SOCIETY

Mission Statement

The Percussive Arts Society® (PAS®) is a music service organization promoting percussion education, research, performance and appreciation throughout the world.

PRESIDENT'S CIRCLE

The Percussive Arts Society wishes to express its deepest gratitude to the following businesses and individuals who have given generous gifts and contributions to PAS over the years.

$500,000 or more	McMahon Foundation
$100,000 or more	Fred Gruber . Zildjian Family
$50,000 or more	Gordon B. Peters . Emil Richards . Mickey Toperzer
$25,000 or more	Carroll Bratman . Ralph Pace Jr. . Nancy & Perry D. Preusch Remo, Inc. . Sabian, Ltd. . Thomas Siwe

see the PAS Online Research Journal: www.pas.org/members/craycraft/index.cfm.

Jeremy wrote to me, concerning his compilation of the bibliography, "I was pleasantly surprised by the breadth and volume of information available to percussionists. Many of these works relate to our field but are outside standard perimeters of percussion research. At least now they're visible. This simple list will hopefully save time, create perspective, and inspire even more scholarship. The person who is willing to read all of those documents [and I am up to only about twenty] can publish the annotated version years from now. I wish that person luck!"

We are deeply appreciative of Jeremy Craycraft's generous contribution of this invaluable resource to the members of PAS! Perhaps there is a PAS member reading this who is so inspired and would like to volunteer to compile the annotated version?

COMMITTEE CHAIRS HANDBOOK

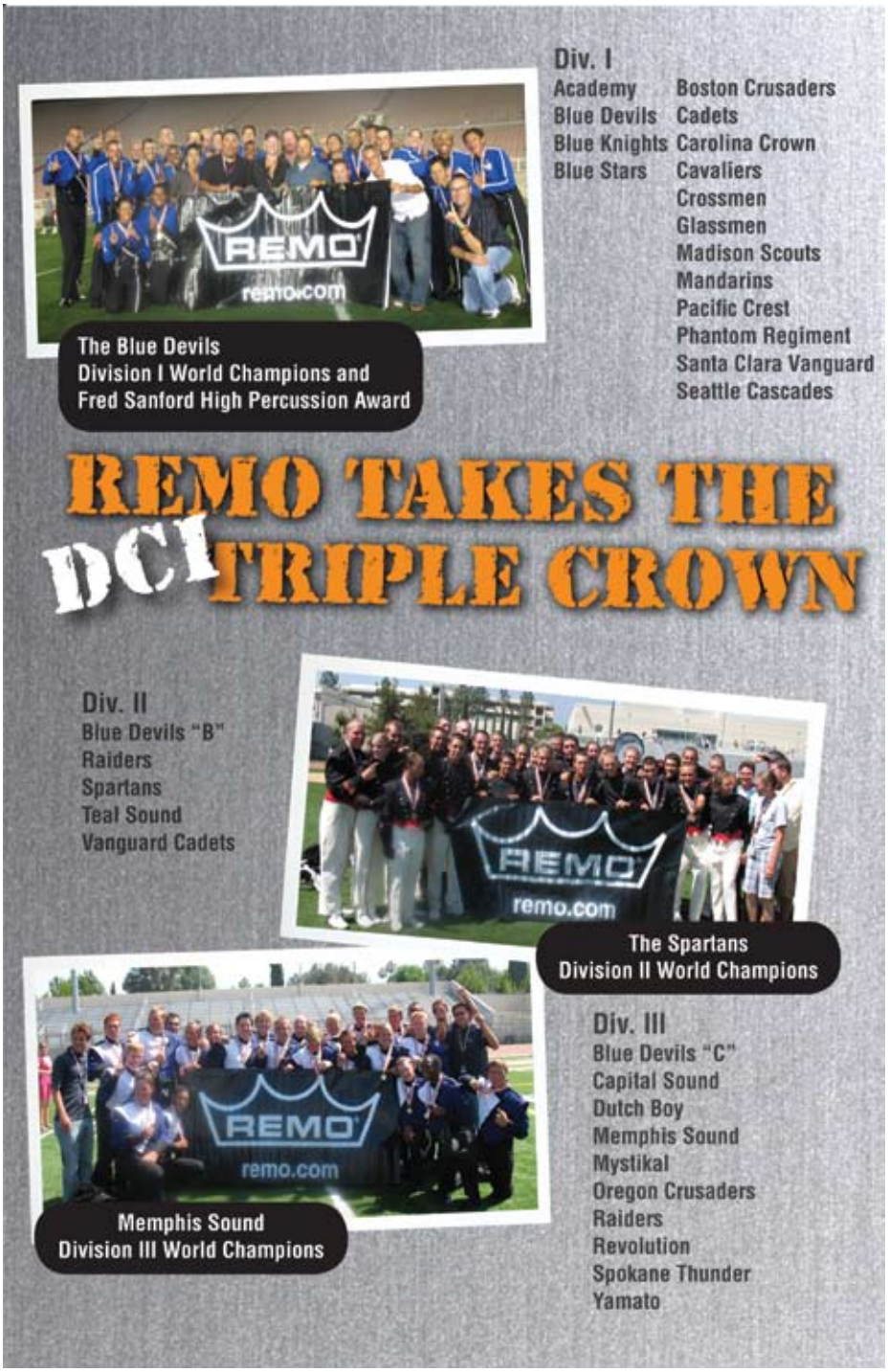
Thanks to the incredible persistence and hours of organization by Vice-President Lisa Rogers working closely with the 17 Chairs of the standing PAS committees, we now have available online a new *PAS Committee Chairs Handbook*. This is a bookend to the *PAS Chapter Presidents' Handbook* that has been online for the past three years. These invaluable resources spell out policies, timelines, report and grant applications, PASIC selection and review procedures, and cover a myriad of other information that helps committee chairs and chapter presidents perform their duties as volunteers serving PAS more efficiently and with greater communication, teamwork, success, and satisfaction than ever before. Any readers who are interested in considering a leadership role in PAS are urged to check out the *PAS Committee Chairs' Handbook* under *About PAS>Committees*, or directly at: www.pas.org/Members/CommitteeInfo.cfm/. The *PAS Chapter Presidents' Handbook* can be downloaded under *About PAS>Chapters* or directly at: www.pas.org/Members/ChapterInfo.cfm.

Again, I thank all the wonderful current volunteers who help make PAS the greatest percussion organization on the planet. I strongly encourage those of you who have it in your DNA to be future contributors and leaders to seriously consider "giving back to PAS" (the remark made by so many of the committee chairs, chapter presidents, authors, and others who serve PAS), by volunteering your service and contributions to our unique community of musicians in the years ahead.

I can always be reached at percarts@pas.org.

Gary Cook

Gary Cook
PAS President



SUBMITTING PROGRAMS

PAS members are invited to submit formal printed percussion solo and ensemble programs for inclusion in program listings. Please include:

Venue (i.e., the name of the school)
Date of Performance
State
Country
Name of Performer or Ensemble
(including director & any guest artists)
Composition Title
Composer's First and Last Name
Arranger Name

Send hardcopy programs to:
Wilber England
3813 Laura Way, Bloomington, IN 47401
E-mail: englandw@indiana.edu

Submit programs online:
www.pas.org/publications/programs

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Society Update

Investing in Our Future

The Percussive Arts Society has a long tradition of looking forward with a vision that is focused on serving its members. As technology continues to advance at an increasingly rapid pace, now is the time for PAS to invest in our technology to build a strong foundation for the future. This investment will include an entirely new database management software system, a content management system for the Website, and a complete redevelopment of the Website. This process will take place over the next 12–18 months and result in an entirely new platform and end product for you, our members.

The first step is the Association Management System, which maintains and provides the data management for business functions. This could be considered the engine that drives our business processes, and we are purchasing a leading, state-of-the-art system. Designed for membership organizations, this software will allow PAS to be more efficient in our process management and much better positioned to communicate effectively with our members. The implementation and training is estimated to take between four and six months, and we plan to be fully migrated to the new system by early fall. This process will take a considerable amount of time and energy from the entire staff and is our primary focus over the next several months.

Once in place, our attention will focus on the Website and its development as the primary avenue to deliver member services. If PAS is to create the very best Website for you, we need your input on what you value and what would be helpful to you as a performer, teacher, and/or student. With your help, creativity, and participation, we can continue moving forward with the evolution of new services further defining PAS as a relevant, vital, and dynamic organization and percussion community. If you are interested in participating or have suggestions, please send an e-mail to PASwebsite@pas.org.

PN

PAS ON MYSPACE

The Percussive Arts Society now has a profile on the social networking site, MySpace.com!

www.myspace.com/pasorg

Playing Timpani Standing vs. Sitting

Following are excerpts from a recent discussion in the Members Forums section of the PAS Website. The discussion can be found in the Timpani topic under the title "Standing versus Sitting." To view the entire discussion (and participate, if you like), visit the Members Only section of the PAS Website (www.pas.org).

Andrew Simco

Many people have asked me over the years if I preferred sitting to standing when I played timpani. I started off standing when learning the timpani as a junior high school student, having been inspired by Saul Goodman of the NYPO (all those Young People's Concerts that I would watch and just soak up the moments that they showed the timpanist). In college, my main mentor on timpani was Fred Hinger, and I switched over to sitting. I continued over the years to sit, and this was reinforced when I took private lessons with Cloyd Duff after I graduated. He reminded me that, in addition to being able to instantly change pitch with the pedals, I was lowering myself to the drums, instead of having to crouch over them. I pretty much stuck to that logic for years, although my admiration for both Saul and Vic Firth led me to play certain works standing up. I also liked the freedom of movement that standing allows; it is easier in some cases to get around the drums. Of course, I am the right height to do both: five foot eight inches tall. I can play and stand with ease, or sit and play. I admit that I sit 95 percent of the time, and stand the other 5 percent. I am interested in hearing from you all; let's get something started.

John Bannon

I'm 5′ 11″. I didn't settle into sitting all the time until I was really learning how to play in the initial period of my first full-time job. When I began that I was still standing quite a bit. In addition to the points you've made, I'd offer these additional comments: (1) Some people who stand virtually all the time usually sit for at least some things. (2) In addition to actual tuning changes, I almost always shade intonation with my feet rather than with a master handle, and I feel like I have better control over intonation when I'm sitting. I also sat when I played Ringers and I would set the handles so I could goose them with a knee to shade intonation while playing. (3) I also like that my resting position is virtually the same as my playing position—no up-and-down, although I do use a chair once in a while. I have had colleagues who predominately stand confess that they do sit a lot in rehearsal. (4) Although this one isn't really a part of my thinking, some people who sit seem to feel that there is a more stable relationship between where we are and where the drums are.

I think this is one of many issues that is ultimately a question of personal stylistic choice, determined by some combination of experimentation and the influence of our mentors. No two of us are exactly alike in physique, temperament, or experience; we're all in unique situations regarding ensembles, equipment, and acoustics, so I think everyone should end up being pretty close to unique in the way they play. Cloyd used to say we need to have "a" way of playing before we find "our" way, but I think we should indeed each ultimately find our unique way.

Andrew Simco

John, that was well put. You are right: there is no right way or wrong way, only the best way for each of us. Both standing and sitting have their good points. I have chosen to sit for the reasons I stated, and this is my personal choice. Interesting what you say about goosing the intonation with the Ringers. Another reason for sitting, at least for me, is that since 2002 I have been suffering from a case of vertigo—not super serious, but caused by fluid dripping on the inner ear. While I still occasionally stand for certain passages or movements, the stool really helps in my case.

Ted Rounds

OK you two, be honest. The height you put on your driver's license ain't the same as when you were 16. I'm in my 50s, so I'm only 5′10″ in golf shoes. Anyway, what remains of my youthful stature is still tall enough so I can't stand tall and play, but have to adapt a posture to get down to the drums. There's a load of factors for why I teach my students to sit. Their intonation skills leave a bit to be desired, for one. Once they have those pitches set (at least in the ballpark), they have to learn to adjust to the ensemble. We have drums in the practice room that don't hold pitch well, which demands that they keep at least one foot on the pedal, sometimes both.

Andrew Proctor

I went from standing to sitting for most of the same reasons already posted. I am a wee bit taller than my esteemed colleagues (driver's license says 6′1″), so by sitting my waist is just slightly higher than the height of the drums, as if I were 5′10″ or so, and it seems that the drums are manufactured for players of average height.

I have encountered another problem stemming from playing in our opera pit. If I sit at my most comfortable for playing height I end up with a very stiff neck by the end of a three-hour opera. I think the reason is because of the height of the conductor's podium. In our pit the percussion, timpani and brass are under the lip of the stage, but the strings are on a lift at least three feet higher with the conductor on his podium about a foot higher still. So I am really playing "up hill" so to speak. If I sit at my "on stage" height I have to slouch and curve my neck so that I can see the music and the conductor properly. By sitting lower I run the risk of hitting the rims of my timps on occasion, but the risk is worth not ending up in traction at the end of the opera. I have considered tilting my drums more than they

are, and I think that would also help the situation. My stool has a hydraulic height adjustment, so I find that I am most comfortable adjusting my stool height a couple of times during the opera. If my back is tired I can relieve the strain by sitting at a different height.

John Bannon

I monitor and often tweak the intonation of every note I play. Managing all this one-footed— i.e., while standing—doesn't appeal to me. I certainly feel much less effective when I try to do it while standing.

However, on the subject of one-footing, I haven't figured out a way to have two clutches on Ringers disengaged without falling on my nose. Since there doesn't seem to be a way to use both feet simultaneously, I can appreciate why there would seem to be less reason to sit if playing those. As one result, I have learned the standard crazy-pedalling licks, Bartok "Concerto for Orchestra," for example (the trick is to lock the D before playing the G-sharp, one-footed). Naturally it's quicker, easier, and generally better with two feet but one clutch engaged at all times, but the proof is being able to do it moving one foot back and forth, which I've specifically practiced. One reason I like Ringers tilted is that the pedal will run into the floor before I run out of ratchet, so I can set a top note the way I do most Dresden-style pedals. The other reason is that the gauges run into each other before the pedals do (unlike when they're flat), so the drums can actually be a bit closer to each other. The knee goosing the handle I mentioned earlier does involve some balancing, and I've never tried it standing. Now, it's been close to 20 years since I've played Ringers regularly, but I did have to hold down a job on a set of them, and all this is what I worked out; it's not just theory.

William Moersch

Well, I'm 6′ 2″ , and if I didn't sit, the drums would be halfway to my knees. If a student happens to be Saul Goodman's height, then I let them stand. Otherwise, I recommend sitting. The main thing is whether their hands fall naturally in the right position relative to the drums or not.

Dallas Gambrell

I am 5′ 7″, so I too can play either way, although depending on the drums that can be a bit short. Standing feels like I have more power or energy, and sitting seems to help me isolate and stabilize what I'm doing. I feel more insulated from trouble while sitting. Sometimes standing to play, while more exciting, can be too unstable for me, like my legs and back are doing unnecessary work by supporting my weight and somehow hindering my hands.

Philip Trembley

I played an audition recently (for grad school), and after I finished, the professor said, "You don't sit?" I thought it was a little strange that he felt so baffled by the fact that I didn't sit. I just told him that for solo rep. I always stand (in a "tai chi" type position with my knees slightly bent and most of the pressure on my quads). There is a greater freedom to execute the often difficult passages in solo repertoire. Plus, it looks a lot better! So there's the visual aspect, and the freedom. However, in an ensemble setting those don't really matter all that much (at least, not as much as solo), right? Generally in an orchestra or band I will sit. Usually the parts aren't wild, fast and flashy. Especially if there are tuning changes or pedaled passages, one must sit. But I do like to stand for certain pieces.

George N Brown

I was a "stander" who, ultimately, morphed into a "sitter." Having experienced the instrument from both sides of the fence (so to speak), I occasionally tell my students that if they stand on their heads, play with their feet and manage to get around the drums and get a good sound, then who am I to judge? I mean, ASIDE from the fact that it would look rather strange...

Andrew Simco

That would look rather strange, George. But you have made an excellent point—the most important one of all in my book. It is how you sound!

Ted Rounds

I'd like to get back to a question Dallas Gambrell raised re: does standing (or sitting) affect the freedom of motion of the hands by siphoning energy for the purposes of supporting your weight? (Paraphrased freely). OK, I'll extrapolate a bit: imagine a boxer hitting the bag while seated. Although 90% of the technique is an upper body motion, you can see how that would lose him some fights, and not just because he wouldn't be able to run away. (Now I have a mental image of Woody Allen playing marching cello.) On the opposite side of the spectrum is a shot out of a sand trap (or while putting): move your lower body at your peril.

I think a lot of it stems from a person's general physiology, coordination, athleticism, etc., and also whether you feel more comfortable facing the outer drums or don't feel the need to. I've tried to experience whether my upper body feels more or less inhibited by standing vs. sitting, and I admit that they just feel too different to quantify. One thing is for sure, doing a lot of repeated drill on a single drum does give rise to somewhat poor posture for me. Adopting a more dynamic and "position of constructive advantage" posture (a la Alexander Technique) does take a certain amount of concentration that I lose easily enough while trying to play an instrument that is too low. Long way of saying I'll experience fatigue a little sooner while standing.

Colin Goodale

At six-one I pretty much sit and play on a taller throne. If your timpani are set properly around you there shouldn't be an issue with moving around, and there are timpani sonatas and what not that require two pitches to be changed at once or quick changes to be made. I'm also practicing on timpani with the old clutch system and that is no fun. **PN**

Having a Blast!

By David Steffens

In 1984, a new drum and bugle corps, Star of Indiana, was formed in Bloomington, Indiana by businessman Bill Cook. Jim Mason, a lifelong veteran of drum and bugle corps, was hired to head the creative team and direct the new corps. Star of Indiana was the first corps in history to finish in the Top Ten at Drum Corps International's (DCI) World Championships in its first year of competition (1985). Top Ten finishes in the World Championships followed annually until the group ended its competitive career after the 1993 season.

In the summer of 1994, Star of Indiana teamed with the Canadian Brass for a ten-city tour of an indoor stage program, *Brass Theater*. In 1995 and 1996, Star again teamed with the Canadian Brass for two more *Brass Theater* tours, appearing at such venues as the Hollywood Bowl, Lincoln Center, and Tanglewood.

Encouraged by the three successful seasons of touring with the Canadian Brass, Cook and Mason began work on their organization's next creative enterprise: *Blast!* Merging drum corps's pageantry, marching precision, and instrumental virtuosity with the repertoire, props, costuming, staging, dance moves, and special effects of musical theater, *Blast!* made its world premiere in December 1999 at the London Apollo Theatre. With a sixty-member troupe of experienced young performers from three standard drum corps sections—brass, percussion, and visual ensemble—*Blast!* overwhelmed audiences with its stunning, innovative show. This was neither traditional musical theater nor traditional drum corps.

In August of 2000 *Blast!* made its United States premiere at Boston's Wang Center. The following April, *Blast!* opened on Broadway at the Broadway Theatre. The show was honored with the 2001 Tony Award for Best Special Theatrical Event—the first time that Tony had ever been awarded. The first *Blast!* national tour opened in Saint Louis, Missouri in September 2001 to rave reviews and record-setting ticket sales.

At the time of this interview with *Blast!* percussionists Lance Kindl, Vince Oliver, and Nathan Jones the cast members of *Blast!* had recently completed a 2007 tour of Japan. *Blast!* is currently on a U.S. national tour through April 27. Blast will perform this summer (June 10–August 3) at Six Flags Fiesta Texas in San Antonio.

Meanwhile, this summer in Japan, the Mason Entertainment Group (MEG), who produces *Blast!*, will be touring a show called *MIX: Music in Xtreme*, which is made up of brass, woodwinds, a visual ensemble, and an entirely electronic rhythm environment that utilizes 289 electronic triggering surfaces played by two percussionists housed in two massive twenty-five foot rolling towers. Oliver and Kindl performed in the 2006 Japanese tour of *MIX*, and Oliver will perform again in 2008 as Kindl and Jones continue performing with *Blast! MIX* is expected to enter the U.S. market in 2009.

Blast! show dates and locations are available at www.megshows.com.

Lance Kindl is a graduate of the University of Georgia and was a member of the Spirit of Atlanta and Phantom Regiment Drum and Bugle Corps.

Vince Oliver graduated from the University of Southern California, where he studied percussion and music composition. He has been a member of the Santa Clara Vanguard and Blue Devils Drum and Bugle Corps and is currently a percussion teacher and music arranger for James Logan High School in Union City, California.

Nathan Jones received undergraduate and graduate degrees from Oklahoma City University and was a member of the Glassmen Drum and Bugle Corps.

Lance Kindl in MIX. Photo by Yow Kobayashi Vince Oliver in MIX. Photo by Yow Kobayashi

STEFFENS: *Can you describe your performance responsibilities as* Blast! *cast members?*

KINDL: In the most recent cast of *Blast!*, I was a "swing," meaning I learned multiple roles in the show and would perform different roles each night through a rotating schedule or would jump in when someone needed a night off. I swung the two snare soloists, another percussion role, and all the spots in the blacklight back-sticking section and the rack section. (The rack is a large stand that suspends RotoToms and cymbals for 8–12 snare drum players.)

OLIVER: Every percussionist in the original *Blast!* show is expected to be able to play rudimental percussion as well as concert/mallet percussion throughout the show. As a soloist, I'm featured in the "Spiritual of the Earth" section of the show on marimba [from Miki's "Marimba Spiritual"] as well as on timbales [during the "Earth Beat" section of "Marimba Spiritual"].

JONES: I am the general percussionist for *Blast!* This includes playing all percussion instruments. I play much of the show on timpani, but I also play keyboard instruments, hand drums, a marching snare drum, quads, and numerous auxiliary instruments. As a performer in this show, I have to switch between rudimental, orchestral, and ethnic performance styles very quickly. There are only a few percussionists in *Blast!* so we all have to know how to play all the percussion instruments to make it through the show.

STEFFENS: *Can you describe your rehearsals and preparations before the tours start?*

JONES: We will rehearse for four to eight weeks at a static location where we put the show together through large and small group rehearsals, and individual practice as well. Individual sections practice together for most of the morning and afternoon with the evening time block usually set aside for full group rehearsal. Throughout the day we have acting and movement classes. These classes range from thirty minutes to two-and-a-half hours in duration. As we get into the later weeks of rehearsal, individual and small group rehearsal times get shorter and we start rehearsing as a full group more and more. By the last

week of rehearsals we are cleaning and performing the entire show.

During the tech rehearsals, we meet up with the actual show set and our crew. Tech rehearsals involve setting the lights and sound levels, and figuring out all of the logistics of running the show, including things like when to push out the marimba or the timing of a curtain movement. Tech rehearsals often include a lot of standing in the same place for fifteen minutes while they set a light cue, or playing the same section thirty times to make sure a monitor level is set correctly. After this arduous task is complete, we start doing production runs of the show with the crew and everything involved.

OLIVER: Additionally, many of us increase our physical activity outside of rehearsal time, including running and weight training. This serves to enhance our physical appearance on stage as well as to more successfully meet the physical demands of the show.

STEFFENS: *While you are on tour, how do you prepare to play the show each day?*

KINDL: I arrive at the theater three hours before show time to run as much music as possible. I always begin warming up my hands on a snare drum for about fifteen minutes, then move to vibes for about ten minutes and then marimba for fifteen minutes. About fifty minutes before the show, we have a ten-minute snare drum sectional with all the players in the back-sticking and rack sections of the show.

STEFFENS: *Are there any particularly memorable performances?*

KINDL: My most memorable performance was my last time in Japan swinging out the snare drum solo. In the middle of the solo, I throw a stick pretty high and catch it behind my back. Well, I dropped the stick during that solo and I went into improvisation mode. The stick rolled about six feet away toward center stage, just out of the spotlight. Staying in the light and standing behind the drum, I pretended to use "the Force" to bring my stick back to me. That was about to work, until I realized I wasn't a Jedi Knight. I tried several different reaching methods, all of which failed. Just then, I remembered that I had three extra sticks in my stick bag. I pulled one of them out.

I didn't really forget about the extras; I knew exactly what I was doing the entire time. During all the stick-dropping drama, I pretended to lose my place in the solo. With my facial expressions, I portrayed that I was lost. So, I air drummed through a fast-forwarded version of my solo, from the beginning, complete with stick tricks. Once I caught back up to where I was and began playing again, I could hear the audience through all the marching snare drum notes, and even more gratifying, I could hear a large group of the cast who were watching from backstage howling with laughter. I can't wait to get back in the lights to entertain!

JONES: My most memorable performance was in the small town of Rexburg, Idaho. The stage was too small to fit our show, but the show was still booked in that theater. We knew about the limitations of the theater in advance and were expecting a long day of rehearsals. When we got there the crew had extended the stage with wobbly platforms, and there was one small exit off the stage-left side. Everybody had to pull together and make it happen. The crowd loved it! We had never heard that much applause. The most memorable part was when our sound engineer, Bob, came on the bus after the show to let us know that he took a crowd decibel reading of 108.

Another moment was when the fire alarm went off at a show in Lincoln, Nebraska. Our stage manager had to make his way onstage during the performance—without getting hit by anything—and evacuate the audience and cast. There was no fire in the building; it was our smoke machines setting off the alarm. We went back in after the fire department checked it out and started the show where we left off.

OLIVER: My most memorable night was a performance while my appendix was about to explode in Fort Lauderdale, Florida, February 2002. My understudy for the marimba solo nearly broke his ankle early in the day, so he was at the emergency room. I got sick during the day, but still had to perform the evening show because no one else knew the solo. Immediately following my performance, which I'm sure was less than stellar, I was rushed to the emergency room, to meet up with my understudy, and then shortly thereafter had my appendix removed.

My second most memorable performance was when my marimba got stuck in the portal offstage while I was supposed to be playing on it, center stage. Everyone else kept playing,

Percussionists from the 2005–2006 US tour of Blast! (l to r:) Matt Finger, Ben Handel, Nathan Jones, Drew Simpson, Chris Reidy, and Lance Kindl

while I tried to do my best interpretive dance in the spotlight. Eventually the marimba made it back on stage, and we finished out the number with a laugh.

STEFFENS: *What preparation should young players have to audition for a show like* Blast!*?*

KINDL: Take the time to work up your hands' endurance for marching percussion techniques, timpani, four-mallet marimba and vibes, and two-mallet playing. Regarding the audition tape, you want to include as much percussion material as possible. This includes marching percussion—even show-off your marching!—two-mallet, and four-mallet techniques, orchestral snare drum techniques, timpani, hand drumming, singing, and acting.

JONES: To prepare yourself for a show of this caliber, you should never limit yourself to one single instrument. Some people think that you can get a job like this by playing snare drum or marimba really well, but soloists in *Blast!* also play 90 other instruments. Versatility in styles and a complete knowledge of all percussion instruments and techniques are essential.

OLIVER: The Website [www.megshows.com] has some recommended literature for audition preparation. I additionally recommend documenting any unique skills that are not musical as well, including juggling, gymnastics, etc.

STEFFENS: *Are there any particularly difficult passages in the show?*

KINDL: One difficulty in the show is finding the energy to make it through the whole show without getting tired. The show is two hours long. This means for about two hours straight we are running and sweating. We all have to make sure to take care of our bodies.

JONES: The hardest piece of my show is "Gee Officer Krupke." I play timpani on this piece and there are twenty pitch changes in thirty measures. It is really challenging.

OLIVER: During the "green" percussion feature of the show, this past summer, I had to play the famous pan-diatonic xylophone excerpt in fourths from Copland's "Appalachian Spring," but in octaves with four mallets. Everything was fine until the last few bars where the intervals changed from straight fourths to a series of mixed intervals. Tough!

STEFFENS: *The show features some very involved snare drum solos; to what extent are those solos improvised?*

KINDL: It's all about preparedness. There is an outline I follow. There are a few specific places in the form where I might try something different.

JONES: The snare drum solos evolve throughout the tour. The soloists usually stick to the same form, but they will add in little tricks or acting portions to keep the solos new and exciting.

OLIVER: The freedom within the snare drum solos has varied from performer to performer. I've seen many different soloists come and go through the company. Some have been super consistent night to night; others have taken huge liberties and chances with their solos nightly. At the very least, most snare drum soloists have had a form from which they work.

STEFFENS: *Any other interesting aspects playing* Blast!*?*

JONES: I think that it is interesting that we repair our own equipment. We maintain and repair anything that happens to our equipment along the tour.

KINDL: You don't have to march drum corps to be in *Blast!*

OLIVER: The hardest part about the job for me was understanding the dual responsibility of being both a stage performer and musician. Early on, I strove to carefully hit every right note during the marimba solo, but my performance probably came off as dry and uninspiring to most. The opposite extreme would be not caring about any of the correct notes and just acting like a madman on stage, jumping around and pounding the instrument without much regard for the music. Finding a balance between these two elements has been a constant challenge.

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Nathaniel Bartlett: Modern Marimba^3 Combining marimba and computer-generated sounds

By Kurt Gartner

If you have the opportunity to experience one of his live performances, Nathaniel Bartlett is likely to change the way you think about music. Utilizing a seamless combination of contemporary composition and performance techniques for marimba and computer-generated sounds and effects, Bartlett is constantly challenging himself and his audiences. Whenever he performs or speaks about his projects, he demonstrates his passion and depth of understanding of all aspects of performance techniques, technology, and aesthetics.

The marimba is capable of a great subtlety and range of expression. Bartlett calls it "the instrument of our time." Therefore, it follows that any effective integration of electronics in performance would require high-end components, including the computer hardware and software, as well as all links within the sound reinforcement chain. As Bartlett puts it, we are in a time when popular technology is "marching backwards" in terms of digital audio. While the portability and convenience of mp3 players have made them ubiquitous in our culture, the data compression algorithms of these players can really attenuate the nuances of recorded music.

Bartlett is moving in the opposite direction, seeking an electronic system that actually enhances the finesse of marimba performance. Currently, his sound projection system includes eight loudspeakers and a subwoofer. The loudspeakers are arranged at the corners of the performance space—above, below, before, and behind the audience. The result is an "ambisonic" effect: true three-dimensional sound that allows listeners to hear and process sounds, which, if not placed throughout the 3D auditory field, would seem much denser in texture. All of these sounds are generated at 96 kHz sampling rate and 24-bit depth, far exceeding the definition and dynamic range of CD audio and providing a match for the refinement of the marimba's tones.

To realize his performance concept of "modern marimba^3"—the seamless fusion of his instrument with computers, electronics, and an eight-channel, cuboid speaker array—Bartlett has collaborated with composers who share both his vision and knowledge. Among Bartlett's first major projects was a collaborative effort with composer Allan Schindler, who is Professor of Composition at the Eastman School of Music and director of the Eastman Computer Music Center. Bartlett commissioned Schindler's work "Precipice – for solo marimba and computer-generated sounds" in 2003, and premiered the work in 2004. (Originally, Schindler developed the work for a four-channel ambisonic sound system, then adapted it for Bartlett's new eight-channel array.) In an excerpt from Bartlett's Website (www.nathanielbartlett.com), Schindler comments on the work:

> This piece gave me the opportunity to explore the very wide range of textures and timbres available on extended five-octave marimbas. In the hands of virtuoso soloists employing contemporary four-mallet techniques the marimba often does not really sound like an ideophonic [*sic*] percussion instrument, but rather can convey almost vocal-like phrasings as well as an extraordinary range of colors. Many of the computer-generated sounds, especially during the latter half of the piece, were derived from recordings of Nate playing his marimba, but often this may not be readily apparent. Through granularization (slicing tones into tiny fragments, then stringing and intercutting hundreds of these sound grains per second into timbral "necklaces"), one can create timbres reminiscent of vocal, aerophone and other types of natural and environmental sounds."

Schindler's work is the centerpiece of Bartlett's 2006 debut recording, *Precipice – modern marimba*. Also included on the recording are "Interlude – for marimba and computer-generated sounds" by Greg Wilder, "Silhouettes" by Augusta Read Thomas, and "Vermont Counterpoint" by Steve Reich.

Bartlett's latest commission project again involves Schindler, in conjunction with a grant from the Fromm Foundation. Schindler's new work (tentatively titled "Take Flight") will fully exploit Bartlett's now-expanded eight-chan-

nel sound system and his vast array of pedals and velocity-sensitive triggers. In performance, Bartlett will exercise real-time control of the computer effects *and* certain aspects of the computer music itself, creating a much more organic musical situation for himself as the performer. Such works may include improvisation, performer-initiated computer events, and fixed elements.

Bartlett likens fixed elements of computer sounds generated within a performance with the fixed sets on the stage of a dance concert. Although the sets may be fixed, the dancers have the freedom to interact with the sets in different ways (e.g., relative to space and time). Similarly, Bartlett treats fixed (pre-recorded) elements of computer music as soundscapes around which he plays.

In addition to the integral nature of computer-generated sounds as compositional elements of his performances, Bartlett uses the real-time processing capabilities of his system to create a synthetic acoustical environment for the marimba itself. For example, he may assess the acoustical properties of a room as being too "dry"; subsequently, he can configure the computer effects to simulate the acoustical environment of a larger hall. This type of effect restores the singing, legato quality of the marimba in its optimal environment without sounding synthesized.

Because the loudspeakers are placed throughout the venue, Bartlett performs without headphones or monitor speakers. In this way, he can maintain the auditory perspective of a soloist performing with an orchestra—effectively adjusting balance and blend and hearing the composite sound in a context similar to that of the audience.

Barlett is as particular about the quality of his recording projects as he is about his live performances. Bartlett's recordings are produced as hybrid multi-channel super audio CDs. One of the key advantages of ambisonic audio recording and production is that it utilizes high-definition 3-D in "sound fields" (rather than the channel-specific placement found in theater-type surround-sound systems). Although he always performs live concerts using his own high-definition 3-D audio system, Bartlett's hybrid multi-channel super audio CD *Precipice – modern marimba* may be played back in several formats (i.e., super high-definition five-channel surround, super high-definition stereo, and CD stereo, which plays on normal CD players).

The works Bartlett performs emphasize concept of "spatialization," in which the placement of sounds in the 3-D field is essential to the compositions themselves. Lighting that draws attention away from the loudspeakers as "sources" of sound may enhance the auditory and psychological effects of spatialization. Bartlett points out that while we must turn our bodies to see and process the full 3-D visual field, we more easily process three-dimensional *audio* information.

In concert, Bartlett encourages his audiences to experiment with closing their eyes to intensify the 3-D audio effect. In addition to placing computer-generated sounds anywhere in the 3-D field, Bartlett can project his marimba sound in a similar manner, denying the listener's expectations to "hear what they see" in front of them, and further meshing the marimba and computer sounds.

The heart of Bartlett's system is a computer running software on the Linux platform. His primary performance controller interface is PD (Pure Data). With this and other software, he controls live processing, pre-recorded sounds, and other elements of performance. He is concerned with precision of audio quality, from its high-definition rendering, through high-quality cables, to high-end loudspeakers.

Bartlett plans to make another recording this summer to complete his next recording project, tentatively titled *Powered Flight – music for solo marimba and computer-generated sounds*. The record will include a prelude and postlude of unaccompanied marimba music: "Tender Buttons" and "Alta" by Stephen Dembski. Also, it will include Schindler's "Take Flight" and other new works by Dembski and Wilder.

While his primary goal may be to offer performances with the highest artist merit, Bartlett is establishing himself as a key player in a fundamental paradigm shift for musicians and audiences alike. Listen to Nathaniel Bartlett, and take the advice of word-jazz paradigm shifter Ken Nordine: "Stare with your ears."

Dr. Kurt Gartner is Professor of Percussion at Kansas State University. As a 2006–07 Big 12 Faculty Fellow, he collaborated with the percussion studio and jazz program at the University of Missouri. There, he provided instruction and performances in Afro-Cuban music and applications of technology in music. He completed his Doctor of Arts degree at the University of Northern Colorado, where he received the Graduate Dean's Citation for Outstanding Dissertation for his research of the late percussion legend Tito Puente. In association with this research, Gartner also studied percussion and arranging at the Escuela Nacionál de Música in Havana, Cuba. PN

Rhythm of the Soul

Music Therapy for Percussionists

By Stephanie Kuester

Most percussionists don't think twice about the existence of a nebulous force called "the power of music." We do know how a really good practice session can alter the course of our day for the better. We recognize that feeling of accomplishment and pride that comes right after we play the last note at a concert. Engaging in music is, for most musicians, a therapeutic experience; we leave our practice sessions with the satisfying knowledge that we have made progress and are better musicians for the time we spent.

Music therapists are also no strangers to "the power of music." However, their satisfaction comes from a different source: the knowledge that music has the power to change not only how we play, but also how—and how *well*—we live.

In the music sector, where the digital music revolution is making some jobs obsolete, the employment of music therapists in a variety of settings continues to grow.[1] Because the profession is quite young, with the first university degree programs surfacing in the 1940s,[2] music therapy continues to develop a supportive body of research, with new studies validating its effectiveness each year. However, in spite of the expanding career opportunities and exciting research, many people—even professional musicians—do not know that music therapy exists. This article aims to introduce the profession of music therapy and, more specifically, to show how percussion can be used within its context.

One professor defines music therapy as "the treatment of the total individual through planned personal interaction and continuous manipulation of the musical environment."[3] Initially, this statement may be a little confusing, so I'd like to emphasize three parts of the definition:

1. *Treatment of the total individual:* This is what separates music therapy from private or ensemble instruction. Music therapy uses music as a means of improving areas such as motor skills, communication skills, and memory skills. The end result in music therapy is not to learn a piece of music or develop as a musician, but to progress in non-musical skills that will enhance a client's everyday life.

2. *Planned personal interaction:* This is what separates music therapy from a therapeutic musical experience, which also involves an interaction between the person and the music.[4] (The effect of a good practice session or rehearsal on your mood may be therapeutic, but it is *not* music therapy!) The most effective music therapists plan structured musical activities that will address the needs of the client. These experiences connect the clients both to the music they are producing and to the therapist who has structured them, therefore enhancing the therapeutic process and outcome.

3. *Continuous manipulation of the musical environment:* Have you ever developed a rehearsal schedule that was completely changed at the last minute? Like music educators and performers of all ages, music therapists must continuously manipulate their therapeutic plans, as they develop, to ensure that the therapy addresses those skills that need the most attention at any given moment.

I think that many young musicians who don't want to perform professionally or teach find themselves, like I did several years ago, facing the questions "What *else* can I do with my music degree?" and "Will I *ever* get a job doing something I love?" For some of these people, music therapy may be an answer. Furthermore, as percussionists, I think we bring a unique and valuable perspective to music therapy because of our intimate understanding of rhythm. After all, "keeping the beat" is not only our responsibility most of the time, it is often our livelihood!

The early pioneers of the music therapy profession understood that rhythm was an integral aspect of treatment. One of E. Thayer Gaston's principles of music therapy was the utilization of rhythm's potential to energize and bring about order, especially through percussion instruments.[5] Likewise, William Sears emphasized that rhythm in music provides a "structured reality" for individuals whose lives may otherwise be chaotic.[6] In other words, when music therapists give their client a drum and they play together, they are not merely "jamming." They are creating a simple reality that can, in time, be applied to a much more complex one—the client's life.

This concept of rhythm as "structured reality" is used in music therapy more than one might realize. An analysis of the application of percussion in music therapy reveals that rhythm and percussion are invaluable tools that serve many purposes and can be used in multiple ways.[7] In order to give the reader a better picture of what music therapists do, however, I would like to illustrate two specific examples.

"Doing Anger Differently," or DAD, is an example of a group therapy technique that uses rhythm as a symbol for experience. The program is designed for teenage boys who have high levels of anger and aggressive behavior, and it gives them an opportunity to express and explore their emotions through a series of structured drum activities and games. For example, in a game called "Mapping Anger," the participants depict the rise, peak, and fall of their angry reactions using their drums and the drums of others.[8] The musical aspect of this program not only facilitates the expression of anger, but it also gives the boys a sense of working as a group.

It is important to note that the goal of this program is not to develop exceptional drumming skills. Rather, the drumming activities are

used as a means to achieve social and emotional goals. According to Currie, "The drums are the initial common expressive modality of the group. As sessions pass and the group develops, the therapeutic group work is focused on assisting boys to understand their own particular experience of anger."[9]

Rhythm can also play a role in the rehabilitation of persons who have experienced brain damage. Michael Thaut, professor of music and neuroscience at Colorado State University, has done numerous studies on the use of Rhythmic Auditory Stimulation (RAS) with victims of strokes, traumatic brain injuries, and Parkinson's disease. RAS uses music accompanied by a "click tone" on each beat to facilitate rehabilitation of movements that are inherently rhythmic, such as walking.[10] The tempo of the music is slow at first, but can be increased to a more normal walking pace. Multiple studies have shown that stride length, ability to walk in rhythm, and velocity of pace all increase for clients who have been treated using RAS.[11] For these people, the added emphasis on each beat of the music provides them with a structure that can help them learn how to walk again.

As we have seen, percussion in a music therapy context can be used to assist clients with a multitude of non-musical skills, including emotional processing and motor rehabilitation. I encourage all percussionists to, at the very least, gain a basic understanding of music therapy and its applications. Many readers who are educators already have done this due to a relationship with their school's music therapist, who can be a valuable consultant for students with special needs in the music classroom.

Those who are interested in more information should consult the American Music Therapy Association's Website, www.musictherapy.org, which gives detailed facts and statistics about music therapy and its educational and professional requirements. I strongly believe that musicians and music educators have the potential to be music therapy's greatest advocates simply because we intimately know the power of music to stir emotions, stimulate minds, and change lives.

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Notational Nomenclature for Multiple Percussion

By Rachel Julian-Jones

"Never has any group of instrumentalists been subjected to the reading of parts that are as incorrectly, or as incoherently, or as inaccurately, or as illogically written, as have the percussionists."[1]

In the beginning, it was natural to notate multiple percussion using conventional notation, since it was merely an extension of an already learned concept. However, it was soon recognized that conventional notation would not always provide an acceptable vehicle for composers' intentions. Therefore, various multiple percussion notational systems were introduced. At present, several different techniques are in use. This article examines selected notational systems for multiple percussion.

CONVENTIONAL STAFF NOTATION

Conventional staff notation, also referred to as five-line traditional notation and five-line staff notation, utilizes the customary five-line staff.[2] Notes are placed on the lines or in the spaces of the regular staff and the composer uses either word abbreviations or pictograms throughout the piece to specify which instrument is to be played and when.[3] Conversely, the composer may present a notational key at the start of the piece.

The advantages to using this system seem obvious. First of all, there is no need to create a new staff or notational idea for this method to succeed. The percussionist should already be comfortable with reading music from the standard staff. Even though the multiple percussionist is often dealing with non-pitched instruments, once the instruments are assigned a line or space on the staff, there should be little uncertainty in interpretation. Of course, if some of the instruments included are pitched keyboard instruments, the staff notation would innately be the best way to notate them.

As with most systems, there are some disadvantages to be considered. There is often not a standard written abbreviation understood for each instrument. That means the composer might come up with his or her own method of abbreviating, which could be cause for confusion. Along those same lines, if one uses a particular language—German, for example—then those who do not understand German would have difficulty in effectively learning to read the notation. The use of universally recognized pictograms would remedy the aforementioned situation, though some pictograms are not universal and might have to be learned anew at the start of each composition.

Instead of identifying instruments by means of written abbreviations or pictograms within the music, a notational key may appear at the beginning of the work. Since one may have to continuously refer back to the key to determine what instrument is to be played, this approach does not facilitate sight-reading. However, for many performers, once the specified notation and techniques outlined in the key are memorized, it actually leads to a more fluid approach to learning the piece, since there is no longer the need to be concerned with processing pictograms or written abbreviations.

An additional disadvantage encountered with conventional staff notation is that there is only room for up to eleven instruments notated at any given time, unless the composer incorporates ledger lines, which in itself may seem overwhelming on a five-line staff. Therefore, if the composer wants to write for more than eleven instruments, some instruments will end up sharing lines or spaces, with the only clarification being the written abbreviation or pictogram. Percussionists who have been faced with this type of notation know how confusing it is to continuously have to read the written word or pictogram and associate it with a line or space that previously belonged to a different instrument.

Since written abbreviations and/or pictograms are not usually incorporated within the work when utilizing the notational key method, a composer may be forced to find some other way of specifying instruments exceeding the allotted eleven. One way of indicating additional instruments is to use different shaped note heads. Another way may be to use upward and downward note stems.

It seems obvious that the best solution to the problem is to employ the grand staff to avoid the overcrowding and instrument limitations all together. Utilizing slight modifications of the grand staff to notate multiple percussion music is discussed in the forthcoming section.

The multiple percussion piece "French Suite" (1962), by William Kraft, utilizes conventional staff notation with a notational key at the beginning of each movement. Another composition that employs this method of notation is "Inspirations Diabolique" (1965) by Rickey Tagawa. Like Kraft, Tagawa provides a diagram of the recommended setup for his work as well as a notational key at the beginning of the piece. Although he uses only six drums, a tambourine, and four cymbals (eleven instruments) in the work, he takes the clarification effort one step further by incorporating different notehead shapes (diamonds and x's) for the suspended cymbals.

More recent multiple percussion pieces that have made use of conventional staff notation include "Matre's Dance" for solo percussion and piano (1991) by John Psathas, "Canned Heat" (2003) by Eckhard Kopetzki and "Machine" (2004) by John M. Allemeier.

Conventional staff notation has remained a popular method of writing for decades. Once the performer understands the notational key, abbreviations and/or pictograms, it provides for a very straightforward comprehension of the work—as long as there is not an overabundance of instruments in the piece.

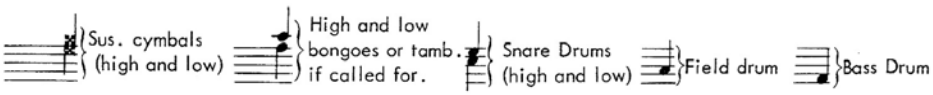
EXPANDED STAFF NOTATION

Expanded staff, two-stave, multiple stave, or multiple system notation uses the same idea as the conventional staff, but employs two or more staves that are bracketed together.[4] This expanded staff enables the composer to write for more instruments than the single conventional staff allows. Each instrument is assigned to its own line or space at the beginning of the piece.

One advantage to this arrangement is that there is no need for any written abbreviations to distinguish instruments as in conventional staff notation. However, reading a staff with a large number of instruments on it is no small task. To memorize the assigned location of each in-

Conventional Staff Notation

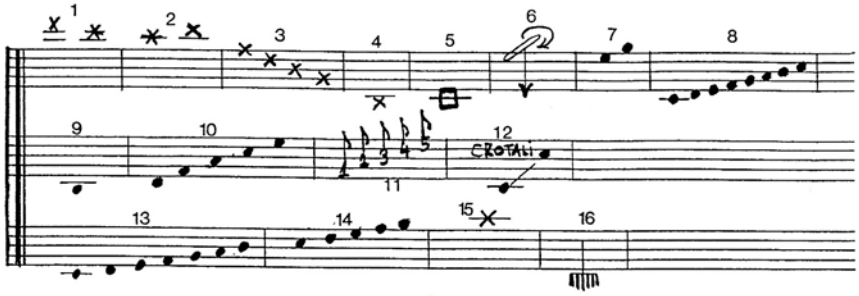
The notation key from "Inspirations Diabolique" by Rickey Tagawa



Expanded Staff Notation

The notation key from Nebojsa Jovan Zivkovic's "The Castle Of The Mad King"

NOTATION AND INSTRUMENTS:



INSTRUMENTS:
(see numbers above in the graphic) .

1. **2 China cymbals**
   each 12 "
2. **2 China (opera) GLISS-gongs**
   bounded on a frame
3. **4 Cymbals**
   8" splash, 12", 15" 18" crash
4. **1 Tam-Tam**
   Flat (or any other) smaller
5. **1 Thunder sheet**
   not too large and sensitive to touch (thin)
6. **1 Rain stick**
   mounted on a rack, so it can be turned around with ONE hand
7. **2 metal tubes**
   (aluminium, 3-5 cm in diameter) with holes for finger vibrato, mounted on a rack.
8. **1 Splitdrum (Schlitztrommel)**
   8 tongues, small in size
9. **1 Bass Drum with Pedal**
   (20 inch)
10. **5 Tom-Toms**
    (10, 12, 13, 14, 15 inch)
11. **5 Wood-Blocks**
    (mounted like a stairs, from low to high)
12. **1 LOW octave crotales**
13. **7 Japanese "Uchwa-Daikos"**
    (Japanese Drum, looks like a tennis racket)
14. **5 "Earth-Plates"**
    (metal Instrument, made by Zildjian Company)
15. **2 Small opera Gongs**
    (used for the beginning and the end, one in each hand, on the string)
16. **Mixed Bamboo and metal wind chimes**
    (hanging together, for a mixed sound)

INSTRUMENTE:
(Siehe die Notenbeispiele oben)

1. **2 China Becken**
   jedes 12 Zoll
2. **2 China (Opera) HEUL-Gongs**
   gebunden am Rahmen
3. **4 Becken**
   8" splash, 12", 15" 18" crash
4. **1 Tam-Tam**
   kleineres, flach oder normal
5. **1 Donnerblech**
   nicht zu groß, eher dünner als dick
6. **1 Regenstock**
   fixiert am Gestell, so daß man es mir einer Hand drehen kann
7. **2 Metall Rohren**
   (Aluminium, 3-5 cm in Durchmesser) mit Löchern für Vibrato, am Gestell befestigt
8. **1 Schlitztrommel**
   mit 8 Zungen, aber nicht zu groß
9. **1 Große Trommel mit Pedal**
   (20 Zoll)
10. **5 Tom-Toms**
    (10, 12, 13, 14, 15 Zoll)
11. **5 Wood-Blocks (Holzblöcke)**
    (montiert wie Treppen, von tief zu hoch)
12. **1 TIEFE Oktave Crotales**
13. **7 Japanese "Uchwa-Daikos"**
    (Japanische Trommel, sieht aus wie ein Tennisschlägel)
14. **5 "Earth-Plates"**
    (Metallinstrument, von Zildjian Company)
15. **2 Kleine Opera Gongs**
    (die vom Anfang und Ende des Stückes, eins in jeder Hand, an Schnur hängend)
16. **Bambus und Metall Stäbchen, gemischt**
    (hängen zusammen, für gute Klangmischung)

strument on the staff, and associate it with the physical location of the instrument itself, one may spend a good deal of time in preparation.

One of the earliest works to take advantage of the idea of expanded staff notation is "Adventures for One" (1963) by Robert Stern. Incorporating two bracketed staves, an occasional single line for suspended cymbal, and altered noteheads, Stern writes for vibraphone, timbales, bongos, suspended cymbal, and four timpani.

Expanded staff notation can range from relatively simple and straightforward to complex, as shown in Charles Wuorinen's "Janissary Music" (1966). Wuorinen employs a total of twenty-seven instruments on five bracketed staves. The staves are divided as follows: one staff for vibraphone, one for marimba, one for timpano in F, one for twelve different metal instruments, and one for twelve different drums. Each staff is labeled throughout the piece as "vibraphone, marimba, drums, metal or timpano." That concept provides clarification since, at any given moment, a staff that is not in use is omitted from the page. The twelve drums and twelve metals are to be learned and memorized by means of a notational key provided at the beginning of the piece.

Nebojsa Jovan Zivkovic used the expanded staff in "Generally Spoken it is nothing but rhythm," Op. 21 (1990/91) and again in "The Castle Of The Mad King," Op. 26 (1998/99). Similar to Wuorinen's piece, "Generally Spoken…" is written for fourteen percussion instruments—seven on each staff—plus vibraphone. Unlike Wuorinen, however, Zivkovic displays all three systems of staves at all times, regardless of whether the instruments are being played or not. Also unlike Wuorinen, he beams many of the notes across systems, which vertically clarifies the rhythmic structure of the piece, especially since there are no time signatures and no barlines.

The expanded staff system of notation for multiple percussion has advantages and disadvantages, just like any other method, but it is a good alternative to attempting to notate a large amount of instruments on a conventional five-line staff.

LINE SCORE NOTATION

Another method of notating for several instruments or instrument groups is line score notation. Sometimes referred to as single-line staff system or an expanded version of one-line traditional notation, this method has proven to be most rewarding in its clarity, albeit it does not always make the most economical use of space or afford visually apparent melodic passages.[5] In other words, contrary to the easily discernible "shape" of a melody written within the conventional staff, when utilizing line score notation, that shape can become distorted as it may have to stretch across several separate lines to connect with the next note. This might have an adverse effect on musical phrasing when one is learning a piece.

In line score notation, pitched instruments are notated on a traditional five-line staff, while non-pitched instruments are arranged one line per instrument, or two or more lines assembled together to form groups of lines and spaces. In the latter case, oftentimes instruments of like timbres will be grouped about the lines and spaces. The instruments assigned to the lines and spaces are identified either by the written word at the beginning of the piece, or via the use of pictograms. Although the lines are usually bracketed together, each line of instruments or group of instruments is clearly separated from the next, which allows for few complications in effectively reading and understanding this notation.

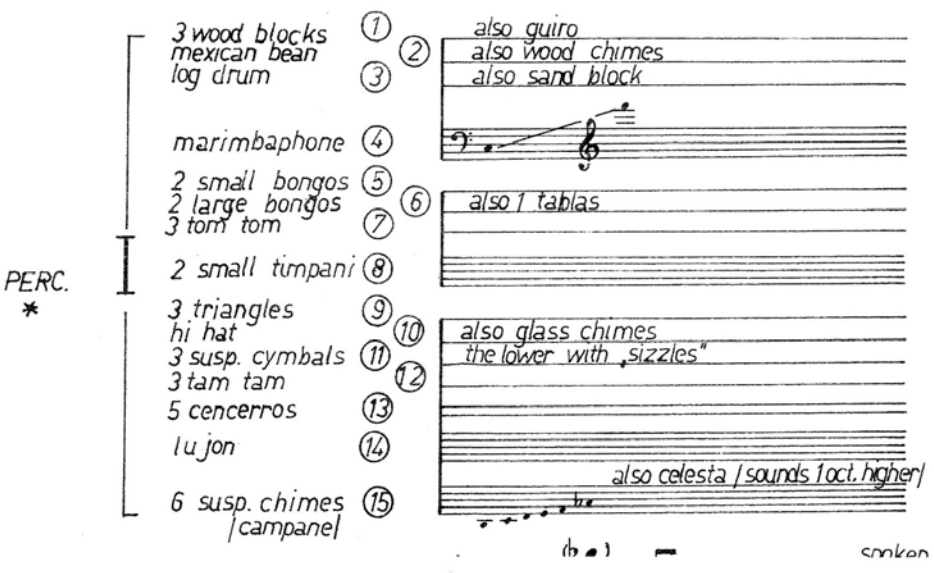
Line score notation allows the performer to visually separate the notes on the page and categorize them for comprehension, thus providing an efficient approach to learning a multiple percussion work. It may also lend to a more clear association with instrument layout if the instruments are arranged left to right with the furthest left written on the bottom line and gradually ascending to the rightmost being written on the top line. Alternatively, one may choose to place the bottom-line instruments closest to the performer with each upper-line instrument placed progressively further away. Either of the aforesaid setups results in a one-to-one relationship between the notation and the instrumental positioning.[6]

One disadvantage associated with line score notation is that it usually takes up more space on the page than most other forms of notation. Since each instrument has its own line or group of lines, the notation must not only allow for the written notes for each instrument, but it must also account for the rests for each instrument. Therefore, there must be written notes and rests on each instrument line to account for all beats, and this may create visual confusion for the performer.[7]

In addition, more space used on a page means more pages overall. Most percussionists prefer not to contend with an excess of pages, as they are already dealing with logistical concerns such as moving within the setup and stick/mallet changes. One remedy to this situation is to display only the lines that are to be played at a particular time. Even then, however, one must keep track of which line is being presented at any given moment. Another disadvantage of this notation is that even if noteheads are beamed together across staff lines, the disjunctive space between the lines may diminish the performer's ability to visually identify rhythmic and/or melodic lines.

Line Score Notation

The notation key from the Percussion 1 part of "Circles" by Luciano Berio



One of the foremost composers to employ extensive instrumentation for multiple percussion utilizing line score notation was Luciano Berio. His five-movement work for female voice, harp, and two percussion players, "Circles" (1960), incorporates fifteen groups of instruments into immense setups for each percussionist. Since groups of suspended cymbals, tam tams, triangles, cowbells, toms and gongs are regarded as single instruments, each performer is responsible for close to thirty separate instruments at any given time. The instruments are separated into three categories, all indicated by the use of bracketed systems. Additionally, each part contains a keyboard instrument. The pitched percussion is notated on the traditional five-line staff, but the non-pitched instruments are written in line score notation. Some of the score is graphically notated, a notational system that is discussed in the next section.

The instruments utilized at the onset of the work are clearly labeled at the beginning of each movement, and instruments that enter later are distinguished as they occur. Following the initial labeling of each instrument, however, the labels no longer appear. Therefore, it is necessary that the performer learn to which line or space a particular instrument belongs. In addition, when an instrument is not being utilized, its respective notational line or space does not appear on the written page at all.

Probably one of the most recognized pieces written exclusively in line score notation is "Thirteen Drums for percussion solo," Op. 66 (1985) by Maki Ishii. This piece is written for thirteen drums of differing pitches ranging from high to low. The instructions state that twelve of the drums are to be chosen by the performer and should consist of bongos, congas, and other skin instruments with calfskin (or Japanese drums). The thirteenth drum is a bass drum with a pedal. Each drum is notated on its own line.[8] Since the notes are all beamed together, the rhythmic relationships between them are clearly apparent, but this is not always the case with line score notation.

An example of non-beamed notes in line score notation is "Rrrrrrr…" by Mauricio Kagel (1981/82). Written for two percussionists, this piece utilizes line score coupled with pictograms. Each player is responsible for specific instruments and must keep track of his or her assigned parts as they appear. The notes are not beamed together, so it is somewhat more difficult to visually discern the rhythmic and melodic relationships between the lines. As with most notational methods, however, once the performer becomes accustomed to instrument placement on the written line, it should be without considerable difficulty that he or she realizes the intent of the composer.

Line score notation is capable of presenting multiple percussion compositions with great clarity. Even though there are some spatial concerns, as well as the uneconomical use of

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space on the page, it has established itself as a fundamental system of notation.

GRAPHIC NOTATION

Beginning with Earle Brown's collection, "Folio" (1952–53), there was a movement geared towards the concept of musical notation as visual art. Subsequently, some composers turned to composing visually stimulating pictorial and graphic representations of their ideas. "Mutatis Mutandis" (1968), by Herbert Brün, displays what he termed "graphic analog" notation. He stated: "The graphic displays turn into scores as soon as the interpreter translates their structural characteristics into the instructional code of another medium (music, movement, etc.) and following his translation recreates the simulated process by analogy."[9]

Brün challenges the interpreter to construct a working model of his graphic structure and to perform it in any medium: sound, movement, language, film, etc. He also stipulates that: The Interpreter is not asked to improvise. The Interpreter is asked not to improvise. He is asked to compose."[10]

This approach is central to the realization of graphically notated pieces in that they are extremely subjective in their interpretations and must be studied and prepared diligently in order to achieve the quality of musical expression desired.

Unique to the composition in which it occurs, graphic notation typically consists of abstract shapes, symbols, lines, pictures, dots, arrows, pictograms, time-grids and many other imprecise and/or unconventional compositional devices. The first commonly recognized solo piece written for multiple percussion, Karlheinz Stockhausen's "Nr. 9 Zyklus" (1958/1960), utilizes both graphic notation and traditional staff notation. In reviewing the work, one critic stated, "the initial impression is that one is looking not at a score but at a drawing by Paul Klee."[11] In comparison with Klee, one can see how the abstract nature of the Stockhausen score does bear resemblance to drawings by the Expressionist artist.[12]

Even in merely browsing the list of instruments required for "Zyklus," one notices both specificity and ambiguity in instrument designation. Likewise, the instructions relating to sound production are both explicit and approximate. Similarly, graphic notation is simultaneously determinate and indeterminate. Therefore, by its very nature, graphic musical notation is intended to liberate the performer's reaction, thereby stimulating the imagination and resultant expression. Time values, tempo, dynamics, instruments, and so forth, are indicated through the use of symbols. The author/composer of a piece written in graphic notation deliberately avoids conveying specific notational indications in the traditional sense, although, the majority of the time, several pages of written guidelines preface the score. Ultimately, they are meant to result in the creative interpretation of the performer.

The end result of the freedom presented in a graphically notated score is that there will be a different interpretation each time it is actuated by a new performer. One must be careful to note, however, that most, if not all, graphic scores are not meant to be exercises in improvisation. In fact, as stated in the instructions of "Acoustic Study No. 1 (for a Qualitative Percussionist)" (1973) by Dr. Michael Udow: "It should be clearly understood that the interpretative approach to these graphics be of an inventive, creative, and intellectual nature. Improvisation is not requested."[13]

One of the most significant pieces in solo percussion literature is "The King of Denmark" (1965) by Morton Feldman. This entirely graphic piece also leaves a great deal of creative decisions up to the performer. Presented on a grid system, the different sections, or boxes, contain the information the performer needs to interpret the piece. Each box is supposed to equal a metronome marking of between 66 and 92. Several of the boxes contain numbers to represent how many sounds should be played within the box. Other boxes are left empty. Broken lines extending beyond a box indicate

Graphic Notation

The notation key from "Acoustic Study No. 1 (for a Qualitative Percussionist)" by Michael Udow

	I		II	III	IV	V
⬠	A3a	B23	BCD	2"	AI4 B6	ABC
▭	Alab	B23	BCD	I"	AI4 B6	ABC
▯	A3b	B23	BCD	I"	AI4 B6	A C
⬭	A3a	BI23	BCD	I0"	AI4 B6	ABC
◖	A3a	B23	BC	3"	AI4 B6	ABC
⏢	A3(abcd)	B3	BCD	6"	AI B6	A
▱	Ala	BI23	D	5"	AI4 B6	BC
○	A3a	B3	CD	I5"	AI4 B6	A C
◿	A3b	B3	CD	6"	AI4 B6	A
⬮	A3c	B32	BCD	3"	AI B6	A
✺	A3___	B3	E	?"	AI7 B6	------

sustained sounds, while Roman numerals in the boxes represent simultaneous sounds. Large numbers indicate that single sounds should be played in all registers in any sequence.

There are still other symbols that are not defined in the performance instructions at all and are thus left up to the percussionist to interpret. The performer is instructed that, rather than using sticks and mallets, all instruments are to be played with fingers, hands, or any part of the arm. Instruments required for the piece range from a triangle, vibraphone (without motor), cymbal, and gong, to skin instruments and "bell-like" sounds.[14]

Feldman disapproved of the idea of musical progress being related to systems and rationalizations. He believed instead in "how it sounds" and he urged the performer to "let the music write itself."[15] His method of notation provides an inspiration for musical expression that can only be realized on an individual level.

As previously stated, graphic notation is unique to the composition in which it occurs. Some characteristics are common to other scores, but overall, this notation is highly subjective in both composition and interpretation. It will likely not be subjected to standardization, as the whole concept of graphic scoring is to interpret in one's own mind.

SPATIAL NOTATION

Spatial, or proportional, notation is often combined with graphic characteristics.[16] It consists of various dots, shapes, or noteheads placed in or around measures, lines, spaces, predetermined grid systems that have time labels rather than actual meters, and even on the infinite background of a blank page. The "notes" are frequently different sizes intended to coincide with the dynamic range—the larger the dot, the louder the sound, and vice versa. Sometimes dynamics are realized simply through note placement on the "staff." The duration of the sound is also often manipulated through the size or shape of the note; it may be elongated or shortened to alter the sound accordingly. Much of the time, both dynamic and durational values are relative to the note occurring before and after a given note within the time label.

A good example of spatial notation is found in John Cage's "27′.10.554″ For A Percussionist" (1956/1960). In the instructions for this piece, Cage states: "a correspondence between time and space is made so that each page = one minute; the numbers above the systems are the seconds of the minute."[17]

The instruments are to be divided into four groups: metal (M), wood (W), skin (S) and all others (A). Cage emphasizes that the virtuoso performance will be one that is rendered through an "exhaustive rather than conventional use of the instruments explored."[18] He places dots on and around lines that are assigned to each instrument group. Any dots placed above a line are to be played louder than the ones below the line, and those dots on the line itself should be played at a *mezzo-forte* dynamic level. Sometimes the dots are lengthened into lines to represent a crescendo. Occasionally, the dots are joined to a line with a stem. In those cases, the stems are added merely to clarify to which line, and thus, to which instrument group the dot belongs. When a small hook appears attached to the dots in the metal group, the player is instructed to let them ring.

Much like graphic notation, spatial notation, although usually quite detailed in its instructions, leaves a lot of room for interpretation. There is a great deal of liberty to be taken within a highly ordered structure of determinate indeterminacy. As with any other notation, the characters on the page should serve merely as a catalyst between the composer's intentions and the performer's artistic interpretation.

HYBRID NOTATIONS

Much of the time, composers do not utilize one single form of notation when writing for multiple percussion. In fact, it is not uncommon to encounter two, three, or possibly even more notational systems in one piece. Hybrids can range from the simple use of pictograms coupled with line score notation, such as that employed in "Pulse/Impulse" (1984) by John Van der Slice, to a graphic score that utilizes pictograms, spatial, line score and conventional staff notation somewhere in its depths (Stockhausen's "Nr. 9 Zyklus"). A working knowledge of all types of notation is necessary to provide a solid foundation for the performing percussionist.

TIMBRE STAFF NOTATION

Timbre staff notation and setup refers to a more recent development in notational language for multiple percussion.[19] Dr. Michael Udow used the idea in his "Timbrack Quartet" (1978), but he formally introduced the concept in the early 1980s.[20] He included pieces employing the method in his collaboration with Chris Watts, *The Contemporary Percussionist: 20 Multiple Percussion Recital Solos* (1986).[21] As a result of working closely with Udow, composer Dave Hollinden has used timbre staff notation in several of his multiple percussion compositions.

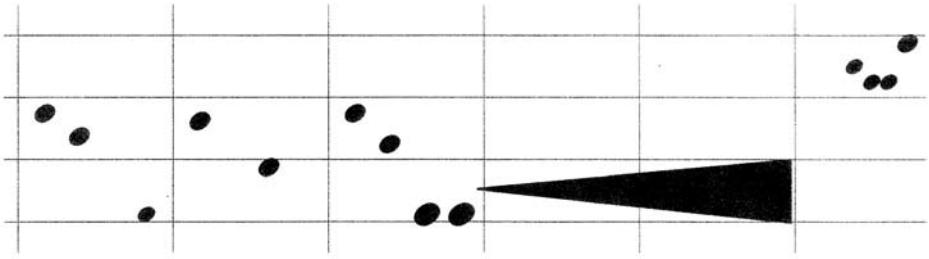
A treble clef with an "X" or slashes (//) through it signifies this notation. The setup and notational key are illustrated with pictograms in the instructions for the piece. Utilizing the traditional staff, each instrument of a multiple percussion setup is assigned to a note from the chromatic scale. To coincide, the instruments are arranged to resemble the physical position of the keys on a keyboard instrument. So rather than there being correspondence between the notated and sounding pitch, the association lies in the relationship between the physical location of the instrument and the notated pitch. This direct correlation between the physical setup and the employment of standard keyboard notation means that the learning process of a new piece should prove to be quite efficient for someone who is familiar with the layout and notation of keyboard instruments. Not only will the comprehension of the notation occur quickly, but the keyboard-oriented disposition of the instruments will afford familiarity to the muscle memory of the performer, which should also result in more efficient learning. Less time spent learning a new notational key means more time concentrating on the creation of the music itself.

By beginning on middle C and incorporating accidentals, timbre staff notation can accommodate up to twenty-one instruments on the traditional five-line staff (from C4 to G#5).[22] Utilizing the grand staff and/or ledger lines, that amount is greatly increased, although, as with other aforementioned methods of notation, an overloaded staff might be less appealing to the potential performer in terms of visual clarity, and thus, a lessened learning efficiency.

Hollinden himself finds that "it works well to include twenty or so instruments on a single timbre staff when there is sufficient variety in the instruments…but, if the instruments instead come from a relatively small number of instrument families (for example, 6 toms, 5 temple blocks, 5 cowbells, and 4 crotales), it can be difficult to arrange the instruments on the staff in a way that makes intuitive sense. And if the written music is based more on instrument

Spatial Notation

An example of spatial notation from *The Multiple-Percussion Book* by Nick Petrella and John Allemeier



family rather than on using all of the instruments on the timbre staff together as one large, composite instrument, then the composer is better off using another notational system such as separate staffs or calling out different instrument groups on a single staff."[23]

Instruments that are difficult to mount within the keyboard setup are usually not included within the chromatic notation, but are rather notated additionally outside the "keyboard" notation.

On the written page, the piece very much resembles that of a mallet keyboard instrument. Hollinden even incorporates phrase markings and enharmonics throughout the piece. Phrase markings are often not present in multiple percussion music, which makes it difficult for the performer to decipher what phrasing the composer intended. The non-pitched material is clearly recognizable as a visible melodic line, and the use of phrase markings supports the melodic shape and provides the player with a stronger sense of musical unity.

Timbre staff notation can be conceived of as a truly universal approach to notating for multiple percussion. It employs commonly recognized pictograms to symbolize instruments and it utilizes the traditional five-line keyboard staff (or possibly the grand staff), which is readily accepted as an established form of notation. It offers the utmost in reading clarity between the actual setup and the notation.

Naturally, timbre staff notation and setup is not appropriate for all multiple percussion music. Not all setups will physically lend themselves to the keyboard configuration. Hollinden states: "There are certainly limitations. Some instruments, due to their size and/or mounting mechanisms, are difficult to fit into a timbre staff arrangement. For example, it's difficult to include suspended instruments such as gongs and cymbals in a setup that otherwise consists of instruments that are mounted on stands or lying on tables. It is for this reason that I typically do not notate cymbals as part of the timbre staff, and instead use "x" shaped note heads on the top staff line and above. Also, the number of instruments involved in the setup can make timbre staff notation less useful. Certainly if a player only has four or five instruments to play, it's not worth the effort of using timbre staff since it requires explanation."[24]

Additionally, in cases that involve indeterminate methods of the notation, such as graphic or spatial, one might find it difficult to recreate the intimate concepts in timbre staff notation.

CONCLUSION

There are advantages and disadvantages associated with each type of notation. Frequently, a new notation is developed in an attempt to remedy the disadvantages of an existing system, while other methods are developed purely for the purpose of igniting the imagination of the

Timbre Staff Notation

Notation key from Michael Udow's "Timbrack Quartet"

INSTRUMENTATION : 4 Timbrepads

A Timbrepad is a group of percussion instruments set up in the configuration of a keyboard, in this case, ('F to E'). The musical staff therefore, refers to timbre placement rather than pitch location. The chart below indicates the timbrepad configuration for this work. (Note: in this work the staff notations for G# and C# indicate wood blocks rather than the frequencies G# and C#, etc. as follows).

= Almglocken

= Cowbell

= Cast iron frying pan

= Temple block

= Wood block

= Clave

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interpreter and resulting in a different interpretation of the piece at each performance. Oftentimes, several types of notation are included within a single piece.

Compositions for multiple percussion are much too diverse to permit standardization in notation and it is ultimately the multiple percussionist's responsibility to have a working knowledge of all notational nomenclature. Rigid rules of standardized notation would lead to a lack of individuality among composers and, thus, a lack of interest in writing for the medium. Timbre staff notation and setup offers a traditional notational approach that might appeal to the otherwise hesitant composer and may offer an excellent opportunity not only for the seasoned composer, but for the aspiring one as well.

ENDNOTES

1. Rupert Kettle, "Composer's Corner," *Percussionist* 6, no. 1 (October 1968): 21.
2. Gary D. Cook, *Teaching Percussion*, 2d ed. (New York: Schirmer Books, 1997), 84; Nick Petrella and John Allemeier, *The Multiple-Percussion Book: Concepts for a Musical Performance* (New York: Carl Fischer, 2000), 9; Michael Gould, "Advanced Multiple Percussion Techniques: An Analysis with Musical Approaches to Performance Problems in the Music of David Hollinden" (DMA diss., University of Kentucky, 1999), 13.
3. Pictograms are drawn symbols that represent various instruments. The employment of pictograms may facilitate sight-reading since the interpreter need not read written information such as written abbreviations within the music. For extensive listings of pictographic representations of percussion instruments, implements and playing techniques, refer to *Tabulatur 2000: The Up-To-Date Dictionary of Percussion Notation* by Siegfried Fink (Hamburg-London: N. Simrock, 2000) and Chapter One of *Pictographic Score Notation: A Compendium* by Gardner Read (Westport, CN: Greenwood Press, 1998).
4. Cook, *Teaching Percussion*, 85; Petrella, *Multiple-Percussion*, 10; Gould, "Advanced Multiple Percussion," 23.
5. Cook, *Teaching Percussion*, 85; Petrella, *Multiple-Percussion*, 9; Gould, "Advanced Multiple Percussion," 27.
6. Reginald Smith-Brindle, *Contemporary Percussion* (London: Oxford University Press, 1970), 10.
7. Cook, *Multiple-Percussion*, 85.
8. Maki Ishii, *Thirteen Drums*, Op. 66 (Moeck Verlag, 1985/86), 3.
9. Herbert Brün, *Composition With Computers*, 6; quoted in Sylvia Smith and Stuart Smith, "Music Notation as Visual Art," *Percussive Notes Research Edition Percussionist* 18, no. 2 (Winter 1981): 13.
10. Ibid., 14.
11. Paul Klee (1879–1940) was a Swiss Expressionist painter. According to the compiler of this article, Ingvar Loco Nordin, this quote was made by a critic regarding his first impression of "Zyklus." Ingvar Loco Nordin, "Stockhausen Edition no. 6," <http://home.swipnet.se/sonoloco2/Rec/Stockhausen/06.html/>.
12. Centered in Germany, C.1905–1940s, Expressionism is a style of art in which the intention is not to reproduce a subject accurately, but instead to portray it in such a way as to express the inner state of the artist.
13. Michael Udow, *Acoustic Study No. 1* (Dexter, MI: Equilibrium Press, 1973), 1.
14. Morton Feldman, "The King Of Denmark" (New York: C.F. Peters Corporation, 1965).
15. John C. O'Neill, "Recent Trends in Percussion Notation," *Percussive Notes Research Edition Percussionist* 18, no. 1 (Fall 1980): 48.
16. Petrella, Multiple-Percussion, 9; Michael W. Udow and Chris Watts, *The Contemporary Percussionist: 20 Multiple Percussion Recital Solos* (Ft. Lauderdale, FL: Meredith Music Publications, 1986), 18.
17. John Cage, "27′ 10.554″ For A Percussionist" (New York: Henmar Press Inc./C.F. Peters Corporation, 1960).
18. Ibid.
19. Early references to this notation also referred to it as adapted keyboard notation.
20. See the following article: Dr. Michael W. Udow, "Visual Correspondence Between Notation Systems and Instrument Configurations," *Percussive Notes Research Edition Percussionist* 18, no. 2 (Winter 1981): 15–29.
21. Udow and Watts, *Contemporary Percussionist*, 35–40.
22. It should be noted that a timbre staff setup can start at whatever point in the chromatic scale is most favorable to the composition.
23. Dave Hollinden, e-mail interview by author, 21 July 2005.
24. Hollinden, e-mail interview.

Rachel Julian-Jones completed her Doctor of Musical Arts degree at the University of Nevada, Las Vegas. She also holds Master of Music and Bachelor of Arts in Music degrees. Rachel is an active freelance percussionist in the Las Vegas area. Her performance credits include the Las Vegas Philharmonic, Steel R&R steel drum duo, Killian's Angels, Turning Point, Nevada Symphonic Wind Ensemble, *Hairspray* at Luxor Hotel & Casino, the Southern Nevada Musical Arts Society, and the Henderson Civic Symphony. She appears on Andrea Bocelli's DVD *Amore Under the Desert Sky* (2005). Rachel is currently piloting the Percussion Specialist program for the Andre Agassi College Preparatory Academy and the Clark County School District. She serves as percussion coach for the Las Vegas Youth Orchestras as well as Coronado High School's front ensemble, maintains a private percussion studio, teaches part-time for the College of Southern Nevada, and serves as secretary for the Nevada PAS Chapter. PN

A Student's Guide to Preparing a Piece for Performance

By Michelle Humphreys

Being given a new piece of music to learn and perform generally provokes two reactions: excitement and dread. We feel excitement when we imagine ourselves performing the piece with physical, technical, and artistic mastery. The trepidation comes as we recognize what it will take to achieve that mastery and wonder if we are up to the challenge.

In order to successfully prepare a piece for performance, it is essential to understand exactly what challenges lie before you. However, you don't have to be daunted by these challenges. With proper planning, you can master the demands of the piece and set yourself up for a successful and enjoyable performance experience.

The following is a process I developed for approaching a new piece of music. By having a specific plan, you can transform your concerns into excitement—which is a much more effective response to the challenge. As you increase your skills and your performing level, you should find that this process facilitates better preparation and, as a result, better performances.

> Eighty percent of any task is accomplished with twenty percent of the total effort. The remaining twenty percent of the task takes eighty percent of the overall work.

STEP ONE: ASSESS THE PIECE

A thorough assessment of the piece will give you the information you need to create a preparation timeline that is realistic and concise. For most pieces I break assessment down into two distinct parts: rhythmic and melodic/harmonic.

Rhythmic Assessment: To assess the piece rhythmically, begin by *singing* through the piece, vocalizing the rhythms as you pantomime the basic hand movements required on the instrument. You can do this with or without sticks or mallets, standing only a few feet away from the instrument. Use a metronome to gauge the appropriate speeds.

This process will provide you with a rough idea of how physically challenging the various sections will be. Even though this first step involves no actual playing, it will help you forecast whether or not you will need to develop new strengths or skills to play the piece. For example:

- Do you see independent rolls?
- Are there sections for five or six mallets?
- Do you see sections where you will be pounding out double stops or block chords at fast tempi?
- Are there fast tuning changes?
- Do you see wide intervallic leaps?

These are important issues to consider early in your preparation. It is a great misfortune—and one that every player experiences at some point—to learn a piece of music for a performance on a predetermined date, only to find that getting the entire piece, or a section of it, up to tempo is more difficult than anticipated. Forcing your body to play harder, longer, or faster than it is prepared to play is a quick route to tendonitis or other painful injuries.

Making this mistake once is a tough lesson. Making it over and over again is a habit that will stand between you and your professional goals. If you have properly assessed these challenges and allowed for them in your timeline, you will have the time you need to develop whatever strengths are required without causing injury.

Harmonic/Melodic Assessment: Having identified the "chops-intensive" sections of a piece, it is time to go on to the next step. Spend time with the music, but not at your instrument. You may find that you can see the music more clearly and be more observant when you don't have mallets or sticks in your hands.

As you study the score, look for patterns in the music. Divide the piece into logical sections, marking them as you go, and try to answer the following questions:

- Does the piece have sections that repeat exactly or with variations?
- Are the melodies based primarily on certain intervals?
- Are there a lot of position changes?

Now do a basic overview or analysis of the harmonic structure:

- Where are the changes in key or tonality?
- What is the relationship between them (e.g., tonic/dominant, relative minor, etc.)?
- Are there places where the harmonies change rapidly?

Having done a preliminary analysis, it is time to develop a timeline that will dictate your process and take you to your performance goal. To do this, take into consideration all the information from your rhythmic, harmonic, and melodic analysis. You should also rely on past experience: How long does it take *you* to learn new techniques, gain note accuracy, work up fast sections, and memorize the music?

STEP TWO: DEVELOP A TIMELINE

To ensure that the music is ready to perform by the desired or required date, I rely on having a fairly specific timeline that leads me to my goal. This schedule will be created around the following four guideposts:

1. Learning the notes and rhythms of the piece;
2. Getting the piece up to tempo;
3. Memorizing the piece (if desired or required);
4. Preparing to perform.

One mistake that students frequently make is not allowing sufficient time for the fourth step. For a performance (whether a jury, a recital, or Carnegie Hall debut) it is not sufficient simply to play the correct notes and rhythms at the correct tempo from memory. To me, this is when the most important part of the process begins and where the player gets the greatest payoff. It is certainly a step that you do not want to rush through!

How much time you will need to reach the various guideposts will depend on your strengths and weaknesses, and how they interface with the information you gained in your assessment of the piece.

Most projects will expand to fill as much time as you give them, and the bulk of the

work gets done at the end of the time allowed. (Think about the last term paper you wrote.) This basic fact of human nature should be taken into consideration when determining and following your timeline.

Most people naturally work under the "50/50 principle": we divide our time equally among the various parts of any given task. Consider instead operating under the "80/20 principle," first put forward by the Italian economist and sociologist Vilifredo Pareto.

Pareto's 80/20 principle states that 80 percent of any task is accomplished with 20 percent of the total effort. The remaining 20 percent of the task takes 80 percent of the overall work.

What does that mean for you? It means that you need to determine which parts of the process will be the greatest challenge for you, and allocate the bulk of your time to those steps.

If you do not feel that you have a very good grasp of what your strengths and weaknesses are, following this process through from beginning to end is a great way to learn that vital information. So let's jump right in!

1. Learning the notes and rhythms of the piece

Why do I call this section "learning the notes and rhythms of the piece," rather than "learning the music"? Because they are not the same thing! For example, I could recite a monologue from Shakespeare, with all of the words correctly pronounced and the poetic accents in the right place, but it would still be a long way from an artistic reading by a trained Shakespearean actor.

When we learn a new piece of music, we begin by simply learning the notes and rhythms. Only then can we go on to make them into music. Both steps are critically important to a successful performance, but they must be approached in order.

The process of learning notes and rhythms will be laborious for some and relatively easy for others. Either way, the process will be made infinitely easier by your preliminary analysis. Here are some things to consider in selecting an amount of time to budget for this step:

- Are broad sections of the piece fairly static harmonically, or is the reverse true?
- Does the composition have many repeats, or is it through-composed?
- Based on what you already know about yourself as a reader, what is the shortest amount of time needed to absorb what is on the page?

Avoid allowing any more time than absolutely necessary. Do not waste time during this step on playing the easy parts over and over again. (It's amazing how tempting it is to do this.) Get on with the task at hand and digest the whole thing. To be successful in this first step, spend the least amount of time on the things that come easily to you.

2. Getting it up to tempo

To be successful in accurately establishing a deadline for this step, it is vital that you know yourself as player in the most physical sense. As I mentioned before, the costs of pushing your body too hard or too fast can be too high to sustain. There are many sad stories of promising musicians who are sidelined by injuries related to overuse.

Depending on the piece and your skill level, this step may not be particularly challenging. Your piece may be slow, or it may be that there are no technical demands that are new to you. But if sections of your piece require strength or skills that you do not yet have, this strength needs to be developed intelligently and gradually.

Use the information gathered in your rhythmic assessment to estimate how much time you will need for this step. Did your initial look at the piece reveal physically challenging elements, such as double stops or chords at extremely fast tempi?

Keep in mind that you can't cram strength or speed. There are physical limits to how quickly your muscles and tendons can respond to training. As a general rule, consider limiting your focused strength-building or speed work to one hour a day out of your total practice time. Allow your muscles time to recover between ses-

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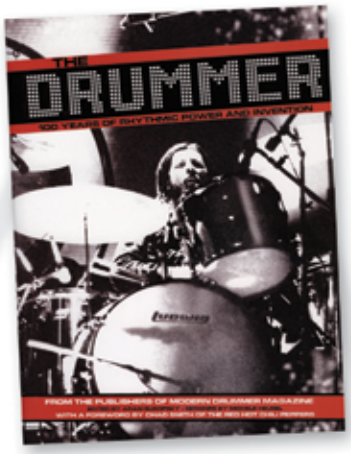

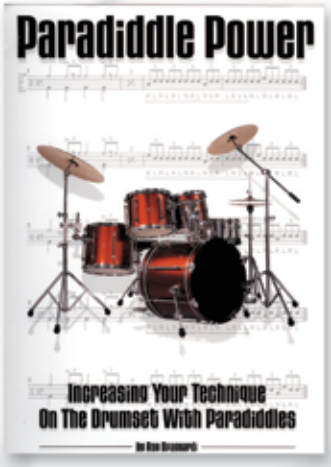

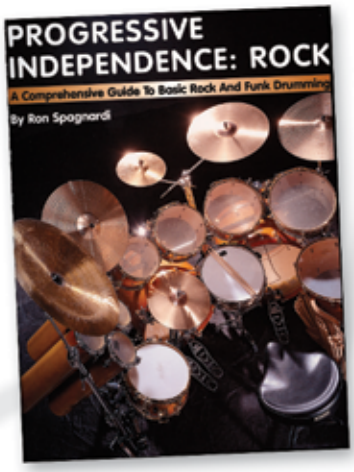

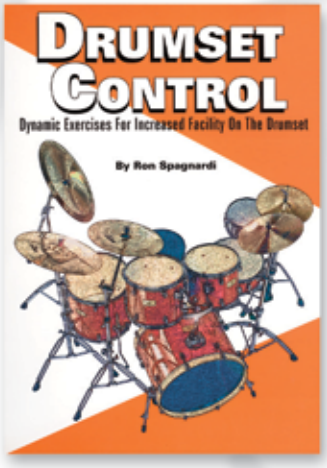

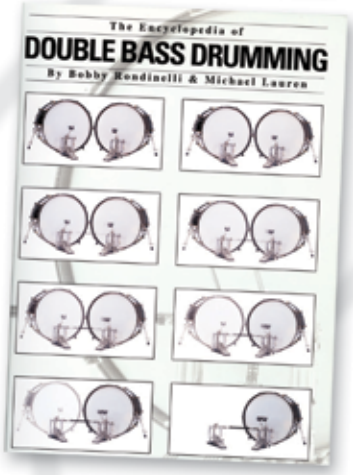

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sions. If you feel pain, it is a sign that you are pushing too hard; immediately scale back your efforts in that arena and use the time for other work.

3. Memorizing the piece

It is not always necessary to memorize a piece, but it can be helpful to the process of working on musical expression. Some people find that by the time they have mastered the notes and rhythms, the piece is almost memorized. Others find memorization difficult. Remember that the stress of performance can make your memory significantly less reliable than it is in the practice room or studio. When choosing a deadline for this task, the following information from your analysis is also pertinent:

- Is the piece through-composed?
- Are there large repeated sections?
- Did you identify organizational patterns that will aid you in faster memorization?

Try to identify what the biggest challenges will be in memorizing the piece, and set a separate time limit for these sections.

If you choose to memorize a piece, try to maintain a good working relationship with the printed page; never stray too far from it. Return to the music by spending time studying it while you are not at your instrument. This might provide you with fresh insight as to the composer's wishes, help you detect details that might have escaped you initially, or inspire you to try new ideas about articulation or phrasing.

4. Preparing to perform

Depending on your level of experience and what type of learner you are, you may feel ready to perform your piece by the time you have completed the first three steps of preparation. But your performance will be infinitely more enjoyable and successful if you allow sufficient time to really make the piece your own.

Having achieved technical and physical facility, you now have the freedom to play expressively and musically. Once you are able to play the piece without concentrating all your attention on hitting the right notes, you may hear new aspects of the piece that might lead to specific interpretive choices. Playing through the piece repeatedly after it is thoroughly mastered technically can allow the piece to "reveal" itself at deeper levels. Use this time to experiment with different phrasings, articulations, or tempo and dynamic adjustments. I think of this process as "breathing" yourself into the piece, or getting the piece into your blood.

Now is also the time to ask yourself the following: Do you see this piece as a unified whole? Do its parts make sense to you, and have you connected them to each other in a cohesive, convincing way? If the piece doesn't make sense to you, it will unlikely make sense to your audience.

Once you have brought the piece to this level, you are almost ready for your performance—but not quite. Being able to execute a piece of music beautifully and well is not the same as being ready to perform the piece in front of an audience. Most students—and, to be honest, many professionals—find performing to be a nerve-wracking experience.

One of the ways I have my students gain familiarity and comfort with the special stress of performing is to require them to invite other musicians, friends, or passers-by into their practice rooms, and perform their pieces for them. You might be surprised at how affected you are by even one or two audience members. Licks that you can play perfectly in the practice room may become train-wrecks. Your own body may feel like it has been taken over by aliens. A piece you know backwards and forwards may suddenly look completely unfamiliar on the page (or fly out of your head, if you have it memorized).

Desensitize yourself by taking every opportunity to perform your piece for other people. I cannot over-emphasize the benefit of making this effort. Build this into your allotment of time for this task. If possible, allow one month for the final phase of preparation. If the total preparation time available to you does not allow for this, challenge yourself to master the first three steps of preparation as quickly as possible to allow as much time as possible for the last step.

STEP THREE: CREATE A WRITTEN SCHEDULE

This final step may seem obvious or unnecessary. Trust me when I tell you that it is neither. Take out a calendar and circle your performance date. Then, using the estimated time frames you have established, and working backward from your performance date, pencil the target date for reaching each guidepost onto your calendar. Now, move each target date up (earlier) by one week, to accommodate the inevitable colds, term papers, and other things that will come up.

Having gone through this analysis, you may find that the scheduled performance date is too close for you to adequately prepare the piece. If it's close, you may simply need to push yourself to be ready a little sooner. But if the discrepancy is great, it is a sign that the piece is too difficult for you to prepare in the allotted time. Depending on the situation, you may be able to change either the piece or the performance date. Although this may be awkward, it is far better to recognize the reality sooner rather than later.

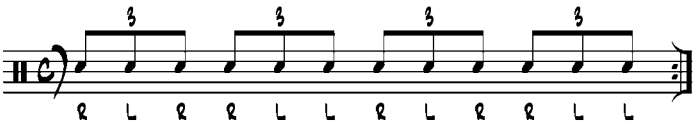
More likely, you will simply find that you need to get working right away! With your plan in place, you can take on your new piece with confidence and excitement. At each step of preparation, you will know that you are where you need to be, and when your performance date arrives, you'll be ready.

Michelle Humphreys is Director of Percussion at Shepherd University in Shepherdstown, West Virginia, and is also on the faculty of the University of Maryland, Baltimore County. She is Principal Percussionist for Baltimore Opera Company, Opera Vivente (Baltimore), and Opera Lafayette (Washington, D.C.), and is also an active freelance performer. Humphreys serves as president of the PAS Maryland/Delaware chapter and is a doctoral candidate at the University of Maryland, College Park. PN

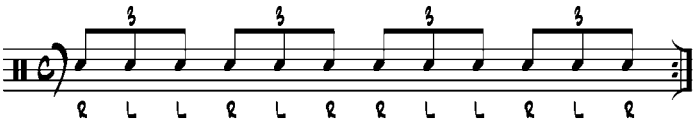
From Paradiddle-Diddles to Swing Rhythms

By Butch Miles

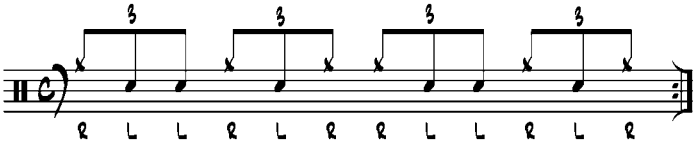
Many rudiments are extremely useful on the drumset, but the paradiddle-diddle has a special place in my heart. Played the standard way, it consists of two single strokes followed by two double strokes, in effect making four downward motions to produce six notes.



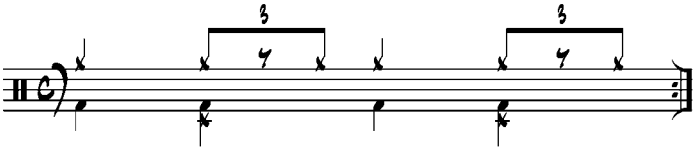
Notice that all of these patterns will start with the right hand. Simply reverse the sticking to start with the left. By changing the sticking pattern to begin in the middle of the rudiment, we begin the process of producing the "swing ride" rhythm pattern on the ride or main cymbal.



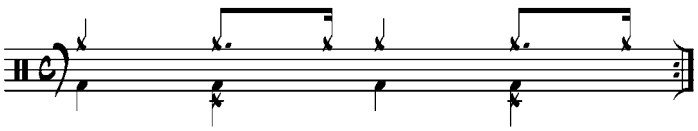
I always check myself to see if the "feel" is correct by playing the right-hand pattern on the cymbal and the left-hand pattern on the snare drum.



Since the swing ride rhythm is based on triplets, it is an easy step to drop the left hand out of the pattern once the "feel" has been established to your satisfaction. But remember: it *must* swing!

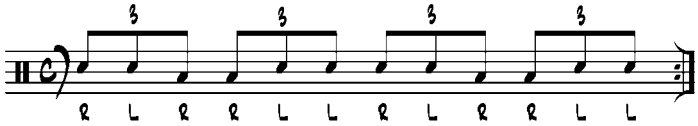


Many ride patterns in the past were notated incorrectly and, if played exactly as written, would "swing" about as much as a drum and bugle corps playing the French National.

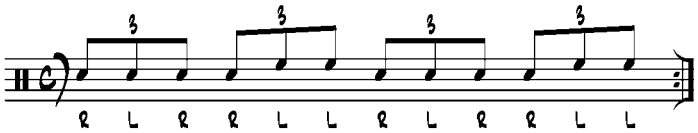


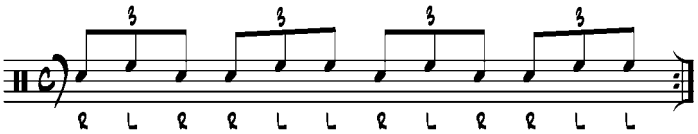
The ride rhythm is originally based solely on triplets. Now we begin to have even more fun with the paradiddle-diddle, hereafter known as the "PDD."

By playing the PDD with the standard sticking pattern and moving the right hand alone from snare drum to side or floor tom, a distinct sound is achieved, even though the pattern has not changed.

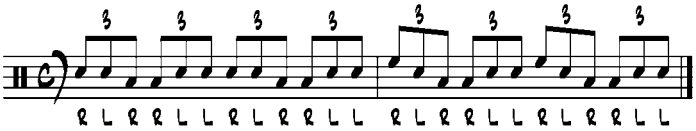


Likewise, by moving the left hand from snare to rack or mounted tom in the following two examples, you have created a distinct swinging sound without changing the sticking.

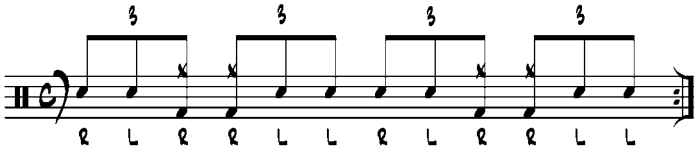




However, that too can be changed merely by alternating sticking patterns (as in the first two examples) between the snare and the toms. One of my favorites is moving the right hand rapidly between both toms and snare and then changing the sticking as noted earlier.

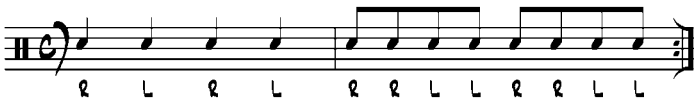


Another is the reinforcement of the right hand on the cymbal with the bass or kick drum shown in the next example. Alternate with the previous example. It's simple and effective.



Once you begin to experiment with the different variations of this simple PDD, I suggest you work on speed (all drummers are speed demons), accents and, of course, dynamics. All these patterns are useful with both sticks and brushes. Please do not neglect your brush work when practicing these examples. Speed, sticks, and loud are fine some of the time, but jazz drums are so much more than that.

One last word on PPD and brushes. Practice double strokes with the brushes. It's not as difficult as you may think, but you'll probably have to work at it a little harder and a bit longer to become comfortable with the technique. Try the old exercise of playing quarter notes (singles) and eighth notes (doubles) for four beats…



…then eight beats, then twelve, and so on. Brushes have little to no bounce, so don't expect miracles immediately. Relax and work on your control and speed. For younger drummers, don't even try to sound as loud with brushes as with sticks. It won't work.

Have fun. Experiment. Listen. That's what jazz is all about, and rhythm and the drums are the heart. Good drumming and swing hard!

Butch Miles was drummer for the Count Basie Orchestra (1975–79 and 1997–2007) and has also played with such luminaries as Frank Sinatra, Sammy Davis, Jr., Dave Brubeck, Mel Torme, Lena Horne, Joe Williams, Ella Fitzgerald, Woody Herman, Clark Terry, Gerry Mulligan, Billy Eckstein, Eddie "Lockjaw" Davis, Harry "Sweets" Edison, Benny Goodman, Tony Bennett, Rosemary Clooney, Wild Bill Davison, Zubin Mehta, Itzak Pearlman, Michele Leeb, Dick Hyman and others. Butch conducts jazz clinics at universities and high schools, and is a faculty member in jazz studies at Texas State University, San Marcos, Texas. Butch has recorded over 100 albums and has been on four Grammy-winning albums. Visit www.butchmiles.com for more information. PN

The Secret Structure in Morton Feldman's The King of Denmark (1964) Part One

By John P. Welsh

Prior to the middle of the 20th century, contemporary music for percussion ensemble was limited. First, the influence of the common practice, which is based on pitch relationships, had been in place since the Baroque era. Second, during the first half of the 20th century, composers demonstrated a spirited interest in pitch relationships afforded by serial techniques. Third, percussion was perceived as a timbral extension of the orchestra.

Nevertheless, the limited percussion repertoire created an opportunity for composers to explore percussion and develop both solo and ensemble literature. On the way, they were led to resolve the use of pitched and non-pitched percussion. Finally, and perhaps most importantly, many composers had yet to accept that a work could be based solely on rhythmic rather than pitch goals. It is during this time that many important percussion ensemble works were written. Composers that include John J. Becker ("Abongo," 1933; "The Vigilante," 1938), John Cage ("First Construction," 1939; "Second Construction," 1940; "Third Construction," 1941); Henry Cowell ("Ostinato Pianissimmo," 1934); and Edgard Varese ("Ionisation," 1931) wrote important early works for percussion ensemble that generate as much excitement today as was seen during their first performances.

Still rarer were multi-percussion solos in which a vast collection of instruments, and thus timbres, was made available to a single percussionist. Remarkably, written within a single 20-year period from 1956 to 1975, four multi-percussion solos—"27′10.544″ For A Percussionist" (1956) by John Cage, "Zyklus" (1959) by Karlheinz Stockhausen, "The King of Denmark" (1964) by Morton Feldman, and "Psappha" (1975) by Iannis Xenakis—were composed and are now recognized as masterpieces in the solo percussion literature.

Through this new medium, sounds and formal structures were explored in ways predicted by Cage as early as 1938. He wrote that composers would not only be organizers of sound, but organizers of time as well:

> The 'frame' or fraction of a second, following established film techniques, will probably be the basic unit in the measurement of time. No rhythm will be beyond the composer's reach.
>
> Percussion music is a contemporary transition from keyboard-influenced music to the all-sound music of the future. Any sound is acceptable to the composer of percussion music; he explores the academically forbidden 'non-musical' field of sound insofar as is possible.
>
> Methods of writing percussion music have as their goal the rhythmic structure of a composition.[1]

27′10.544″ For A Percussionist (1956) by John Cage (1912–1992)

Cage's "27′10.544″ For A Percussionist" is the last in a series of related time-length pieces. With the duration for each page set at one minute (with each section marked along the top of each system), four percussion groups—metal, wood, skin, and all others (e.g., electronic and mechanical devices, radios, whistles, etc.)—are notated. Cage suggests that a performance will include a wide variety of instruments and mallets and an "exhaustive rather than conventional use of the instruments." Proportional notation indicates when a particular percussion group is to play, and the distance of dots above or below a line corresponds to relative loud or soft dynamics, respectively. All other elements, such as articulation, pitch, and register are to be determined by the performer.

"34′46.776″ For A Pianist" (1954), "31′57.9864″ For A Pianist" (1954), "45′ For A Speaker" (1954), a text composition that incorporates Cage's lectures, new writings, noises, and gestures to explain his compositional methods, "26′1.1499″ For A String Player" (1955), and "27′10.554″ For A Percussionist" are based on the same numerical rhythmic structure. Although the scores feature both conventional music notation and graphics, chance procedures determine all aspects and details of the works. The identity of these time-length pieces and similar works, such as his "Music of Changes," is brought into question. Cage identifies with all performances regardless of the outcome; whereas, the performer plays an unfamiliar role in the work's realization:

> The function of the performer in the case of the 'Music of Changes' is that of a contractor who, following an architect's blueprint, constructs a building… He is therefore not able to perform from his own center but must identify himself insofar as possible with the center of the work as written…an object more inhuman than human, since chance operations brought it into being. The fact that these things constitute it, though only sounds, have come together to control a human being, the performer, gives the work the alarming aspect of a Frankenstein monster.[2]

Many questions were raised when Cage requested performers to faithfully bring into being sounds determined not by choice but rather through chance operations. Moreover, Cage extended this request in a bold compositional stroke in which he instructs that all of the time-length pieces may be played alone or together in any combination. In any of these pieces, the content and note-to-note details of a solo performance are unrepeatable and unpredictable; hence, its identity lies outside traditional models. Moreover, with simultaneous performances of these works, all recognizable features of each piece vanish and the resulting composite is itself without precedence. Cage's approach cut at the very heart of the Western music tradition and shifted a composition away from a rigid, formal identity to one where the focus is on the ever-changing moment achieved during a performance. Richard Toop adds: "[this] allows for the obliteration of every distinguishing characteristic of each individual piece, and thus undermines any attempt to view any one of them as a self-contained unit".[3] With Cage, the composition as an object is destroyed and the traditional relationship between composer and composition, and even performer, has been abandoned.

Cage's time-length pieces are like containers

for sounds within a measurement of time. They were important in his search for an art that resembled nature and its manner of operation. For Cage, this could only happen by removing himself from the compositional process and becoming, in a sense, an observer to the work's creation.

Psappha (1975)
by Iannis Xenakis (1922–2001)

"Psappha," written for Sylvio Gualda, is, according to Xenakis, a "purely, rhythmical composition" of 13 minutes where timbre is subordinate to the temporal structures that are generated during a performance. Xenakis notates attacks by using dots plotted against a time grid with precise metronomic speeds indicated in the score. In this way, 16 registral lines are notated, while instrumentation is specified in a general way. Two categories of timbres are indicated: skin/wood and metal, where each category has three registral classes (high, middle, and low) of instruments further subdivided into two or three registral gradations. Like Cage, Xenakis instructs that non-traditional instruments be used:

> I want something that is not musical in the traditional sense, something which does not remind me of some other instrument or which even has other associations; just a category of timbre which could be replaced by some other.[4]

Furthermore, dynamics are always *forte*, and many different sticks and mallets should be used to distinguish the various categories of timbres. Thus, "Psappha" focuses on the attack characteristics of percussion instruments where the implementation is separate from its formal characteristics. The composition of "Psappha" is rooted in Xenakis's application of mathematics. By creating "outside-time structures" through his application of sieve theory, a mathematical scheme that allows elements to be sifted or extracted from a larger set of elements based on selection criteria, Xenakis composed a general solution that could be realized by a performer using any percussion instrument. The bold, stark clarity of attacks allows "Psappha" to focus, not on traditional elements such as melody and phrasing, but rather on time and its perception. Indeed, Xenakis described "Psappha" as "an investigation of the definition of time and the role played by spatial relationships in that definition."

Zyklus (1959)
by Karlheinz Stockhausen (b. 1928)

"Zyklus," which means "cycle," was written as an obligatory percussion work for the Kranichstein Music Competition and premiered by Christoph Caskel in August 1959. Between 10–16 minutes in duration, this was Stockhausen's first composition removed from pitch relationships based on 12-tone technique. Relying on his research into electronic sound production, the structure of "Zyklus" is based on a complex electronic pulse created by the composer. There are nine instrumental cycles—one for each instrument: side drum, hi-hat, triangle, vibraphone glissandi, guero, marimba glissandi, tam-tam, jingles and rimshots—of 17 periods (of 30 seconds each), which accelerate and ritard using varying numbers of attacks to distinguish each cycle. The score emphasizes attack quality; and, to this end, Stockhausen employs proportional notation consisting of a scale of note sizes where size corresponds to dynamics.

Such gradations of intensity would be difficult to represent with conventional musical notation. In all, there are 16 pages of graphics and conventional musical notation that are spiral-bound. The player may start on any page, but must complete one cycle—that is, all 16 pages must be played in a performance. Standing in the center of a circle of percussion instruments, the player rotates from one position to another to complete a cycle. "Zyklus" uses both open and closed forms; there are indeterminate structures as well as fixed structures. Stockhausen writes:

> Thus, one experiences a temporal circle in which one has the impression of moving constantly in the direction toward ever-increasing ambiguousness (clockwise) or certainty (anticlockwise), although at the critical point at which the extremes touch, one of them imperceptibly turns into the other. The purpose is to close the open form through the circle, to realize the static state within the dynamic, the aimless with the aimed, not to exclude or destroy one aspect or another, not to seek a synthesis in a third state, but rather to attempt again to eliminate the dualism and mediate between the seemingly incompatible, the utterly different.[5]

By the late1950s, Stockhausen and other European composers were aware of the open-form mobile scores of Earle Brown, the chance procedures used by John Cage, the indeterminate scores of Morton Feldman, and the broad performer involvement found in the work of Christian Wolff. Feldman has said that composers such as Boulez and Stockhausen worked to systematize open form and chance techniques rather than pursue a "powerful, mysterious aesthetic" and search "within their own sensibilities."[6] Herein lies an important aesthetic difference between composers on opposite sides of the ocean.

The King of Denmark (1964)
by Morton Feldman (1926–1987)

In a 1983 interview with Jan Williams in *Percussive Notes Research Edition*, Feldman recounted a very different compositional environment for "The King of Denmark"

that many of us would not come to expect, especially those in Europe:

> "The King of Denmark" was a very special situation. I actually remember writing "The King" on the beach on the south shore of Long Island, and I wrote it in a few hours, just sitting comfortably on the beach. I wrote the whole piece on the beach. And I can actually conjure up the memory of doing it—that kind of muffled sound of kids in the distance and transistor radios and drifts of conversation from other pockets of inhabitants on blankets, and I remember that it did come into the piece. By that I mean these kinds of wisps. I was very impressed with the wisp, that things don't last, and that became an image of the piece: what was happening around me.[7]

For others, though, it was time. As Cage predicted, time became the focus of the compositional process. Both Xenakis and Stockhausen were attracted not only to the spectrum of attacks afforded by percussion and new notational methods, but also to the variety of temporal structures in which the element of sound attack assumes a central design role.

Feldman chose a much different approach. His interest lay in a less permanent, ephemeral quality of sound and a less rigid approach to time notation during the early years. Feldman liked to call it projecting sounds in time where they could be free of compositional rhetoric. And Stefan Wolpe described Feldman's music as "remnants of shapes that can barely be heard at a distance."[8] To this end, Feldman revealed the most unusual aspect of "The King of Denmark":

> What's interesting about "The King" is that percussion was always used in the sense that what was exciting about percussion was a kind of fantastic availability of all these different kinds of attacks—and here, I take out the aspect of attack. What did I do by using the fingers in "The King"? What happened? I took out what was considered its strongest aspect.[9]

Preferring to strike percussion with human flesh rather than with mallets, Feldman puts the performer in direct contact with the sound production. While it may seem that the multivarious attack world typically experienced in percussion music produced with mallets and sticks is ignored, a surprising situation emerges nonetheless. Gradations of strikes produced by the fingers, fingernails, knuckles, elbows, and arms create a wide-ranging assortment of sounds and timbres. In addition, Feldman elevates the absence of sound to a structural level. As a result, sound and silence ascend to equally important roles toward defining the work. By playing with different parts of the body, the physical nature of making music surfaces in much the same way that Jackson Pollock, Robert Rauschenberg, and other painters of the New York School were *in* their work. But, it is the color-field paintings of Mark Rothko that have the closest affiliation to Feldman's music. Rothko's monochromatic rectangles are elemental, even primordial, and, for him, it was a way to capture the spirituality and universality of all nature.

For Feldman and others too, a work could now be based on sound and only sound. But Feldman chose indeterminacy, which allowed him to consider new working methods and new musical relationships that were otherwise not possible with more traditional approaches. Using graph notation and traditional musical notation, each new piece during Feldman's early years explored a new set of relationships with parameters such as register, dynamics, timbre, and duration.[10]

Feldman notates the number of sounds to be played, and occasionally the category of a sound, on a time grid where the ictus or box (an ictus being M.M. = 66–92) is the basic unit of measurement. In "The Anxiety of Art," he wrote that the decay of each sound was his focus and not its attack, whose source should be kept hidden. He continued: "Actually, what we hear is the attack, but not the sound. Decay, however, this departing landscape, *this* expresses where the sound exists in our hearing—leaving us rather than coming toward us."[11]

These gestures helped Feldman make an analogy between music and painting, especially with the early paintings of Philip Guston and the work of Rothko. Abstractions seem to float before the viewer and form a kind of stasis. The graph helped Feldman to realize a similar kind of stasis in music. Feldman's gestures or wisps of sounds project no symbolic profile, only sound in what Feldman liked to describe as a "totally abstract sonic adventure."[12] The poet Frank O'Hara further added that Feldman focused on "unpredictability reinforced by spontaneity" to create a work without reference outside itself.

The origin of the title "The King of Denmark" may not be as widely known today as in the past. In the fine interview with Williams, Feldman explains that the title came after the piece was finished when he made some unknown leap from the soft wisps on the beach to a former king of Denmark. He was referring to Christian X, who was the Danish monarch from 1912–47. The king refused to leave his occupied country during the Second World War and go into exile in a foreign country like many of his neighboring monarchs. The king, in fact, moved freely around his country on horseback wearing a Star of David in silent protest. This act of defiance toward the invaders was a symbol of courage and unity to his countrymen and was seen in newspapers around the world.

During this period the spirit and determination of the resistance in countries like Denmark, Sweden, Norway, and others was unyielding. Taken from John Steinbeck's wartime novel about the European resistance, *The Moon Is Down* (1942), there is a heated exchange between an enemy colonel and the mayor about the legitimacy of the occupation of his town. Speaking not only for his people but for all people, the mayor fires back: "And these tendencies and practices have been proven wrong in every single case since the beginning of the world."[13] And lastly, at the time "The King of Denmark" was composed, 1964, the United States was deeply involved in the Vietnam War, which rendered strong reactions at home.

So it was fitting for percussionist Stephen Schick to write in his concert notes for the series "Three Nights of Percussion" in New York in 1998 that "The King of Denmark" is an anti-percussion piece."[14] It resists all the tendencies inherent with percussion. But, it could also be a kind of memorial to those unknown heroes, many of whom have gone unrecognized, and their resistance efforts in many countries during the Second World War. In the same way that Christian X quietly resisted his conquerors, so "The King of Denmark" is a symbol of resistance in the world of percussion where playing with sticks and mallets is standard technique. Today, more than 40 years after its composition, it is a striking

reminder of what today's modern urban landscapes are not.

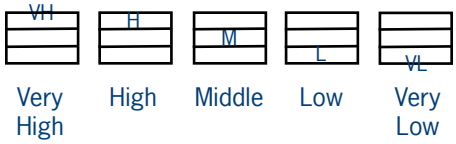
ANALYSIS

For nearly 15 years, Morton Feldman composed music on graph paper. The "Projection" series (1950–51), "Intersection" series (1951–53), "Atlantis" (1959) for orchestra, "The Straits of Magellan" (1961) for seven instruments, and "The King of Denmark" (1964) for solo percussion are several of his most important graphic scores. In these works, Feldman shaped sound through broad compositional gestures that focus on density, register, timbre and silence—musical parameters not generally considered of primary importance at the time of their composition.

Page one of "The King of Denmark" has been reprinted in Example 1. Feldman's search for an appropriate notation, like the graph, is revealed in the following remark:

> Between 1950 and 1951 four composers—John Cage, Earle Brown, Christian Wolff and myself—became friends, saw each other constantly and something happened. Joined by the pianist David Tudor, each of us in his own way contributed to a concept of music in which various elements (rhythm, pitch, dynamics, etc.) were de-controlled. Because this music was not 'fixed,' it could not be notated in the old way. Each new thought, each new idea within this thought, suggested its own notation.
>
> Up to now the various elements of music (rhythm, pitch, dynamics, etc.) were only recognizable in terms of their formal relationship to each other. As controls are given up, one finds that these elements lose their initial, inherent identity. But it is just because of this identity that these elements can be unified within the composition. Without this identity there can be no unification. It follows then, that an indeterminate music can lead only to a catastrophe. This catastrophe we allowed to take place. Behind it was sound—which unified everything.[15]

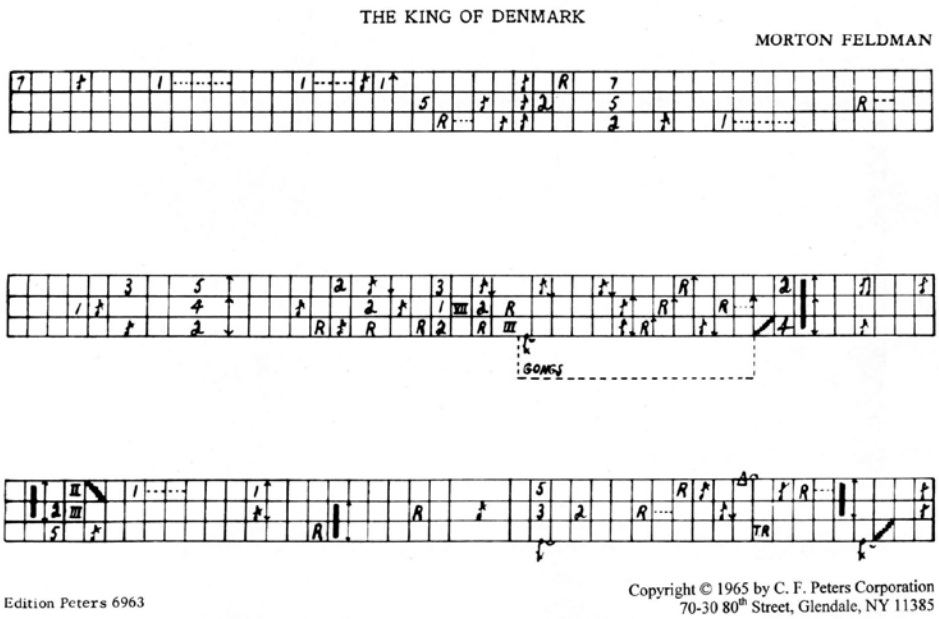
Example 1 reproduces page 1 from "The King of Denmark" where icti 1–135 of the work have been notated. Below, Feldman's performance directions have been summarized. The graph is read from left to right where a system consists of three boxes to denote register. General categories of register are indicated in the graph as shown, but the player determines the specific demarcation of high, middle, and low registers as well as the very-high and very-low registers.



Dynamics remain soft throughout the piece. Numbers stand for the number of sounds played in each box. All instruments are played, not with sticks or mallets, but rather with fingers, hands, arms, etc.

Thick lines (usually spanning several registers) indicate clusters; Roman numerals represent simultaneous sounds. Large numbers, spanning several registers indicate sounds played in any register in any order. Sustained sounds are notated with broken lines and the symbol (⌒) stands for "let vibrate." Two

EXAMPLE 1: The King of Denmark, page 1.



instrumental groups—skin and metal—and seven instruments are specified. Three types of rolls are notated. Table 1 summarizes Feldman's notations and their definitions in the graph with regard to instrumental groups, instruments and rolls.

For the purposes of this analysis, the score has been re-notated and annotated (see Example 2, "The King of Denmark," Re-notation/Annotation). The published score of "The King of Denmark" is designed for performance. The re-notation is designed to facilitate this analysis. It follows four parameters—timbre, duration, register, and instrumentation—through the work in a manner not unlike the unfolding of contrapuntal lines in more traditional notation. In this way, the structure of the work can be more readily observed. In addition, the very-high and very-low registers have been graphed like the other registers. A conversion has been made for all symbols and numbers found in the graph. To this end, the following conventions have been adopted:

1. A thick line or cluster is read as two attacks in the register where it appears.
2. A Roman numeral or simultaneity is read as the total number displayed.
3. Grace notes are read as one attack.
4. **R** is read as four attacks per ictus.
5. Diagonals crossing several boxes (i.e., glissando) are read as one attack per ictus for each register that it crosses.
6. In section IX, the score indicates "as many different sounds as possible." Previous to this direction, the highest number of attacks in any single ictus is 12, which occurs in section IV. For this re-notation, "as many different sounds as possible" has been interpreted as ten attacks distributed over the five registers (see Example 3).

In the Re-notation/Annotation, thick vertical lines with section labels define the formal structure that is summarized in Table 2. The work is partitioned into 11 sections, identified by the aforementioned lines. Reasons supporting this partitioning will become clear as the analysis proceeds.

The duration of the 11 sections is graphed in Figure 1. The information here is a graphical representation of Table 2. Important structural information is suggested here. The mean[16] duration of a section is 38 icti (indicated with a broken horizontal line). Section I begins above the mean, rises in section II, and drops below the mean in section III. Section IV begins near the mean, followed by the longest section in the work—section V—while sections VI and VII are the shortest sections of the work. Sections VIII and IX start slightly above the mean; then they drop, for a third time, to a low count in sections X and XI.

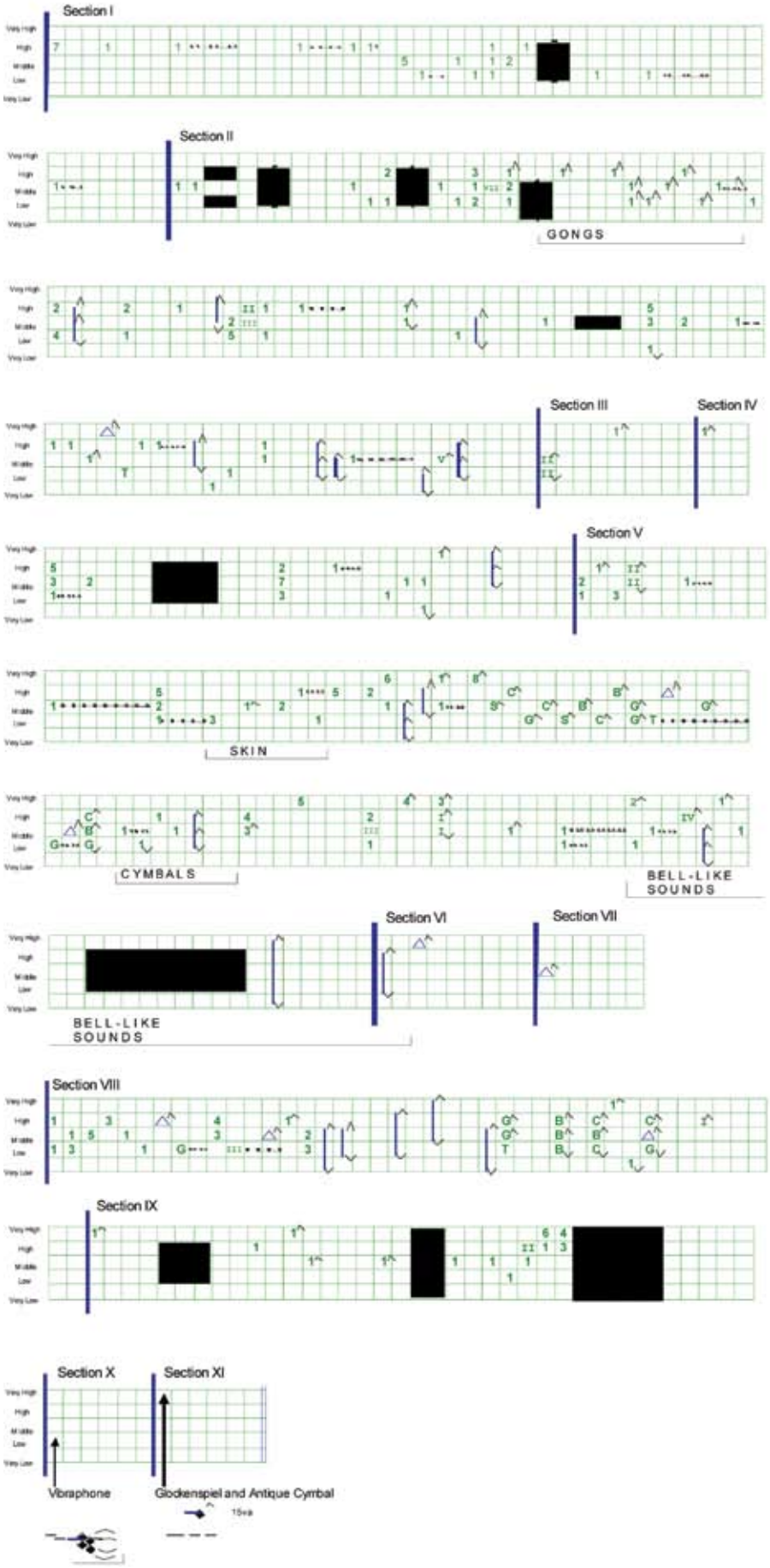
TABLE 1: Notation and Definition of Instrumental Groups, Instruments and Rolls

INSTRUMENTAL GROUPS	
~Notation Used in Score~	**~Definition~**
S	Skin instrument
B	Bell-like sounds

INSTRUMENTS	
~Notation Used in Score~	**~Definition~**
C	Cymbal
G	Gong
△	Triangle
T	Timpani
VIB.	Vibraphone
ANT CYM	Antique Cymbal
GLOCK	Glockenspiel

ROLLS	
~Notation Used in Score~	**~Definition~**
R	Roll (no instrument specified)
T.R.	Tympani Roll
G.R.	Gong Roll

EXAMPLE 2: The King of Denmark, Re-notation/Annotation



Thus, a well-defined three-part formal design emerges.

The duration of the 11 sections themselves reveals a three-part design that recurs at every level of the forthcoming analysis. In general, each part begins near the mean of 38, is followed by two relatively long sections in III and V and shorter sections VIII and IX, and ends with a dramatic decrease below the mean. Without exception, the shortest sections always occur after the longest sections.

EXAMPLE 3: Re-notation/Annotation of "as many different sounds as possible"

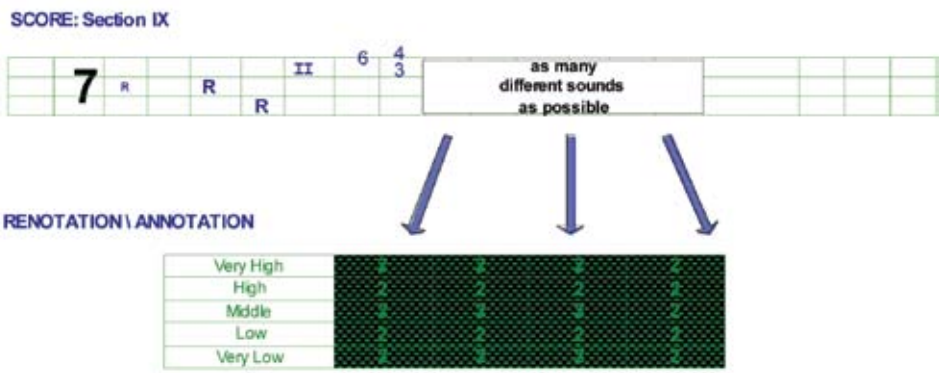
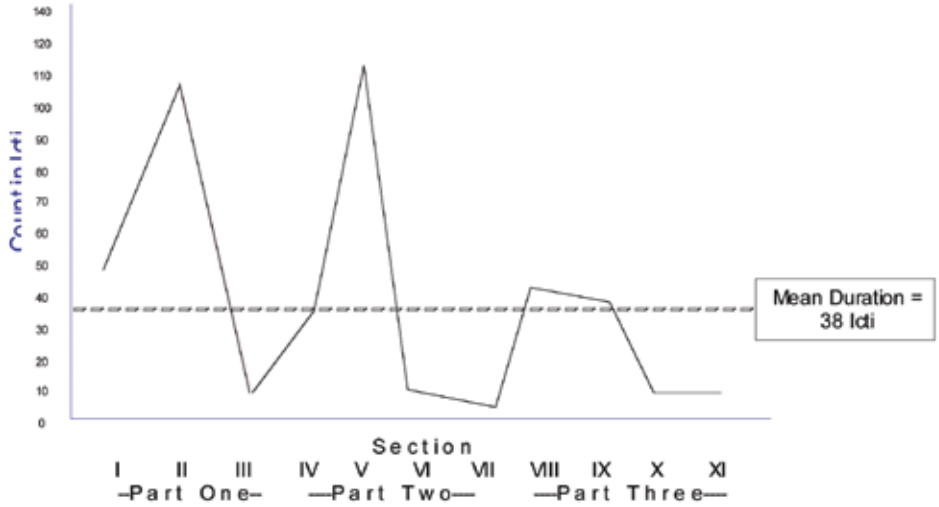


TABLE 2: The King of Denmark, Formal Design

PART	SECTION	ICTI	DURATION OF SECTION
One	I	1 – 49	49 icti
	II	50 – 152	103 icti
	III	153 –161	9 icti
Two	IV	162 – 194	33 icti
	V	195 – 306	112 icti
	VI	307 – 315	9 icti
	VII	316 – 321	6 icti
Three	VIII	322 – 363	42 icti
	IX	364 – 401	38 icti
	X	402 – 407	6 icti
	XI	408 – 413	6 icti

FIGURE 1: Duration of the Eleven Sections



The score and re-notation immediately call attention to silence. Silence, among the most significant parameters in Feldman's graph scores and all of his music, helps create the sectioning in "The King of Denmark." The longest silence extending to any point defines a section. The counting of silent icti in "The King of Denmark" is demonstrated in Example 4—the first section of the work.

The duration of silent icti for the entire piece appears in Table 3. Silences of duration one, two, or three are common. However, silences of the length of four icti or more are rare. They create the partitioning in the work. Moreover, while the duration of the sections decreases in each of the three parts, the length of the silences increases, which serves to further isolate sounds and bring them to our attention. For example, in sections I and II, silence is distributed over the duration of the sections with the longer silences occurring near the end of a section; however, in section III, seven of its nine icti are silent. This observation can be seen again in Parts Two and Three.

The structure of "The King of Denmark" is revealed by weighting the different musical elements that Feldman notates on his graph. The analysis now focuses on the mean densities of events, which affords the opportunity to measure indeterminacies such as timbre, register, duration, and silence, which Feldman uses to create his sonic design. In this way, results can be quantified, which will characterize all possible realizations, not just one performance. It will be seen that the composer builds a hierarchy of control. Dynamics, density and sometimes instrumentation are specified; whereas tempo, timbre, register, duration, and silence are only specified in a general way. Pitch and articulation are open, to be freely chosen by the performer.

"The King of Denmark" and, in fact, all of Feldman's graph music, works against traditional Western methods of composition. Pitch, for centuries the focus of Western music, is not relevant to the structure Feldman creates. As such, pitch will not be discussed in this essay. Rather, "The King of Denmark" reveals its sonic identity through the evolution of timbre, register, duration, density, instrumentation, and silence.

Part Two of this article will appear in the June issue of Percussive Notes.

ENDNOTES

1. John Cage, *Silence* (Middletown, CT: Wesleyan University Press, 1973): 5.
2. Ibid: 36.

3. Richard Toop, "Chance and Choice: American and European Music" in *Circuit* no. 6; (Cambridge, England, June 1973): 10–17.
4. Iannis Xenakis, Score to *Psappha* (Paris: Editions Salabert, 1976).
5. Robin Maconie, *The Works of Stockhausen* (London: Oxford University Press, 1976), 118.
6. Walter Zimmerman, *Morton Feldman Essays* (Kerpen: Beginner Press, 1985), 25.
7. Morton Feldman, "Interview with Jan Williams," *Percussive Arts Research Edition* 21, no. 6 (Sept 1983): 4–14.
8. Stefan Wolpe, "On New (and Not-So-New) Music in America," translated by Austin Clarkson, *Journal of Music Theory* 28, no.1 (Spring 1984): 25.
9. Feldman. op cit.
10. It is well documented that Feldman became frustrated with the graph for the same reason that he chose to use it. The graph allowed indeterminacy to emerge. Feldman shaped parameters such as register and duration in varying degrees; but the graph also exposed a weakness with regard to pitch. There was a tendency to become too design-oriented when using the graph and pitch received insufficient focus. So with pieces such as the "Durations I–V" and "Last Pieces," pitch is notated while other musical parameters are only suggested or not written down at all.
11. Zimmerman. op. cit., 89.
12. Zimmerman. op. cit., 25.
13. John Steinbeck. *The Moon is Down* (NY: Viking, 1942); current edition with introduction by Donald V. Coers (NY: Penguin Books, 1995), 49.
14. Stephen Schick. Program notes from "Three Nights of Percussion" (New York, 1998).
15. Zimmerman. op. cit., 48.
16. Mean is understood as arithmetic mean where the set of values is the sum of all values, divided by their number.

EXAMPLE 4: Counting of Silent Icti in Section I, Icti 1 – 49

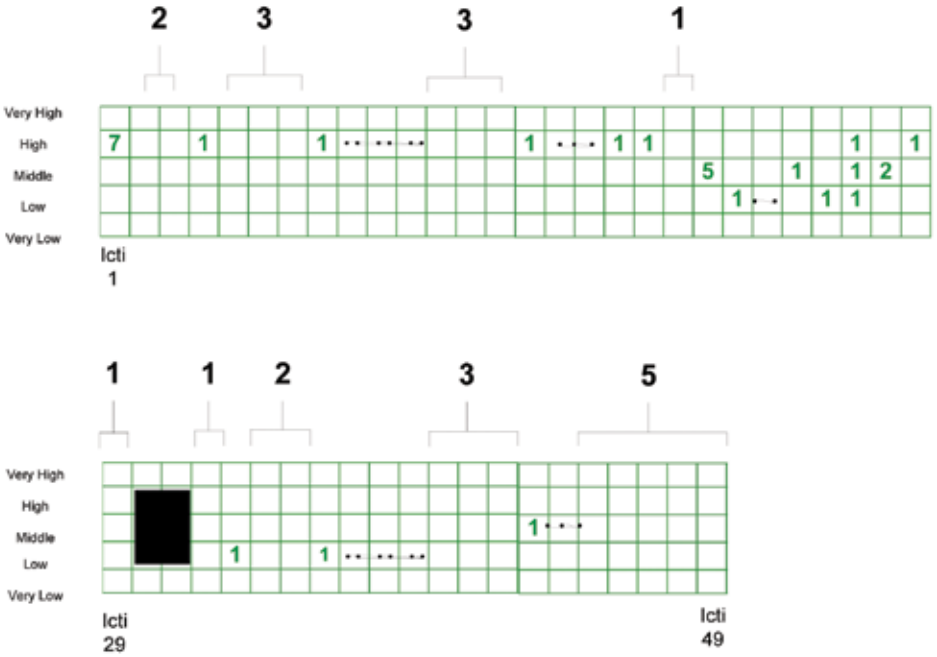


TABLE 3: The King of Denmark, Count of Silent Icti in Sections I - XI

Part	One			Two				Three			
Section	I	II	III	IV	V	VI	VII	VIII	IX	X	XI
Duration of Section	49	103	9	33	112	9	6	42	38	6	6
Count of Silent Icti in Each Section	2	1	3	2	2	1	**5**	2	3	**5**	**5**
	3	3	**4**	3	3	**6**		1	2		
	3	2		3	1			2	1		
	1	2		2	1			2	3		
	1	2		1	1			1	1		
	1	1		2	1			2	1		
	2	1		**4**	1			**5**	**6**		
	3	3			2						
	5	2			2						
		3			3						
		1			1						
		1			1						
		1			3						
		2			3						
		1			2						
		2			1						
		4			**5**						

John P. Welsh is a composer, theorist, and pianist. He studied at the University of Maryland at Baltimore County, Rutgers University, and the University of Maryland at College Park, where he received a DMA in musical composition. His theoretical writings have appeared in *Perspectives of New Music*, *Percussive Notes Research Edition*, *Interface*, *Ear Magazine*, *ex tempore* and *Washington Review of the Arts*. He has served on the notation committee for the Percussive Arts Society, and recent compositions include "Many Shadows" for any two melody instruments, "Seasons: parallels and partings" for violin and piano, "December Structures" for cello, piano, and two percussionists, and "scraps of echoes…" for snare drum, published by Smith Publication/Sonic Art Editions. His recent book, *The Music of Stuart Saunders Smith*, is part of The Excelsior Profile Series of American Composers. PN

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Analysis of the 12-pulse *palmas* (clapping) rhythm and its relationship to the standard African bell pattern

By Jerry Leake

Flamenco embodies a complex musical and cultural tradition that can be traced back to the 1400s. Although considered part of the culture of Spain, flamenco is actually the music of Andalucian gypsies.[1] Flamenco is a multifaceted art involving singing (*cante*), dancing (*baile*), and acoustic guitar (*guitarra*), along with rhythmic punctuations played by hand claps (*palmas*) and a box drum called *cajon*.[2] The limited scope of this article cannot begin to explore the rich history and evolution of flamenco music; the focus here is on one specific form called *Alegrias*. First, some background information.

COMPAS/PALMAS/FORM

The term *compas* represents the unique meter, measure, or bar within which flamenco music is played and danced. One could also use the term "cycles" to describe the *compas* structure.

Palmas refers to the specific accompanying clapping pattern that is built within the *compas* structure. There are two types of *palmas* techniques: *sordas* and *claras*. Soft claps (*sordas*) are produced when the open palms strike together in a low, muted tone. Louder, higher-pitched claps (*claras*) are produced when the fingers of the strong hand land into the open palm of the weak hand.

The numerous flamenco forms can be characterized by their *compas* structures, their *letras* (song verses), by the key signature, and even chord progression in which the music is performed. Popular forms in 4/4 include Tangos and Rumba; forms in 6/8 and 12/8 include Fandangos, *Bulerias* and *Alegrias*. Each form is played with different *palmas* patterns.

ALEGRIAS PALMAS

An important aspect to understanding the language of *Alegrias* ("happiness") is the relationship between beat 12 and beat 1. The *Alegrias palmas* pattern actually begins on beat 12. This is not to say that beat 1 is unstressed; many guitar and vocal phrases begin on beat 1. It is the specific treatment of the *palmas* pattern within *Alegrias* that is examined herein. In the most basic *compas* structure there are five accented claps sounded within the 12-beat phrase. Shown below, the five underlined numbers (12, 3, 7, 8, 10) represent accented claps with the remaining seven beats clapped softly.[3]

To practice, count the numbers (beginning from beat 12) while clapping accented and non-accented strokes. Use both *sordas* and *claras* clapping techniques. With practice over time, this unusual "12 equals 1" phraseology—where 12 is the first beat of the cycle—will become comfortable—and even quite natural.

12	1	2	3	4	5	6	7	8	9	10	11

Once proficient with the voice and clap, one can try stepping to the phrase in a six-beat fashion whereby each step contains two numbers. Begin with the two feet together and follow the specific parenthetical stepping sequence. When repeating the phrase, the feet switch positions, as shown below.[4]

R = 12, 1 (right foot steps out, weight is placed to this foot)
L = 2, 3 (left foot steps in lightly, no weight to this foot)
L = 4, 5 (left foot step out, weight is placed to this foot)
R = 6, 7 (right foot steps in lightly, no weight to this foot)
R = 8, 9 (right foot steps out, weight is placed to that foot)
L = 10, 11 (left foot steps in lightly, no weight to this foot)
L = 12, 1 (repeat: feet switch positions, left foot steps out)

12	1	2	3	4	5	6	7	8	9	10	11
R		L		L		R		R		L	
L		R		R		L		L		R (repeat)	

FLAMENCO FOCAL POINTS

Next, important focal points of the music can be noted. Beat 10 is a critical cadence point where the dance and music end their phrases together in a dynamic fashion. Beat 11 is dramatic in its musical silence and statuesque pose of the dance. The music and dance resume at beat 12 and continue the cycle of intricate development and potent cadence to beat 10. In my experience, when the guitar initially begins an "instrumental" composition in *Alegrias*, the *palmas* pattern often first enters on beat 7.[5]

Summary of Events:
- Accented claps are 12, 3, 7, 8, 10
- *Palmas* enter on beat 7 (instrumental scenario)
- Music and dance phrases cadence to beat 10

BEAT/"CELL" ANALYSIS

The unique structure of *Alegrias* contains challenging syncopation that supports the music's growth within the inherent tension and resolution points of the phrase. In this article, each rhythm "cell"—12, 3, 7, 8, 10—begins on the pulse with the accented clap and lasts until the next cell. The duration of the five "cells" contained within the pattern is uneven, and yet, at the same time, is elegant and logical.

The duration of the first cell from beat 7–8 is "one" stroke, the duration of the second cell from beats 8–10 is "two" strokes, from beats 10–12 is "two" strokes, from beats 12–3 is "three" strokes, and from beat 3–7 is "four" strokes. What results is a unique expansion of accented claps within the phrase.

Shown below, the underlined number "1" represents accented cells (from beat 7); all other numbers are rendered softer. Above this

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expanding cell series is a top row in small font size that illustrates the beat numbers 1–12.

Count expanding cells as:

1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	1	2	1	2	3	1	2	3	4

The same sequence with the top row of numbers beginning from beat 7

7	8	9	10	11	12	1	2	3	4	5	6
1	1	2	1	2	1	2	3	1	2	3	4

A stacked "tower-like" illustration of the five cells (from beat 7) reveals the expanding duration and stability of the structure.

1
1 2
1 2
1 2 3
1 2 3 4

RELATIONSHIP BETWEEN *ALEGRIAS* AND AFRICAN BELL PATTERN

My experience with African music from the Ewe and Dagomba people of Ghana encompasses rhythms in binary pulses of 2/4 and 4/4, and ternary pulses of 6/8 and 12/8. Recently I recorded a contemporary arrangement of a traditional African drum rhythm in 6/8 with the 12-pulse *Alegrias* pattern played on *cajon* and *palmas*. I was struck by how well the two traditions worked together, as if born from the same musical mother. This prompted me to compare the seven strokes of the 12/8 standard African pattern to the five accented claps of *Alegrias*.

A reinterpretation of *Alegrias* in a 12/8 ternary feel requires three pulses per beat, as opposed to two pulses per beat. In this non-traditional form, beat 12 of the *Alegrias* is placed onto beat 1 of the 12/8 phrase.

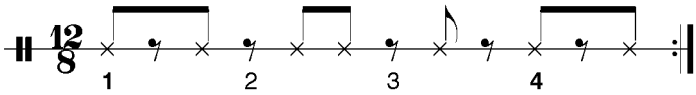
Shown below, the "/" represents the division of beats; the "x" represents accented *Alegrias* claps; the "–" represents non-accented claps. Numbers below the phrase refer to the original *Alegrias* structure. Notice that the first and second claps now land on beats one and two of the 12/8 structure. Instead of stepping in a six feel (as before), step to the 12/8 phrase shown below in a four feel: R, L, L, R. When repeating the phrase, steps retain their same orientation.

Alegrias in 12/8 Pulse (four feel):

R L L R
x – – /x – - /– x x /– x –
12 3 7 8 10

A primary element of the 12/8 African bell is how on-beat strokes align with beats 1 and 4, with all other strokes landing off the beat, as shown below. I notated the phrase using eighth notes and eighth rests for maximum beat clarity.

Standard African 12/8 Bell:

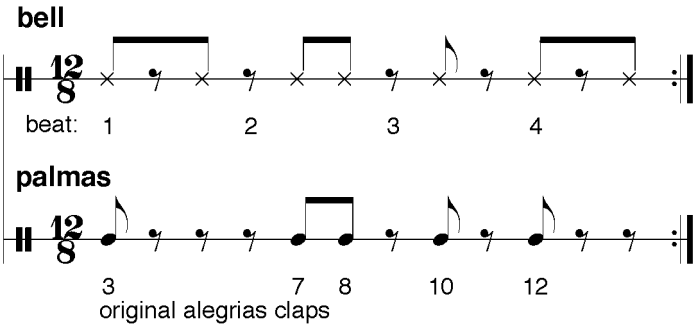


In the previous "*Alegrias* in 12/8 pulse," claps aligned with beats 1 and 2, with the three remaining claps off the beat. By rotating the *Alegrias* phrase back one beat, the pattern shares the same on-beat points as the African bell. The 12 of *Alegrias* now aligns with beat 4 of the 12/8 bell. *Alegrias* numbers are included to show where its phrase originates.

Alegrias Realignment:

x – – /– x x /– x – / x - -
3 7 8 10 12

What also becomes clear is how the second and third off-beat strokes of the *Alegrias* realignment coincide with the off-beat strokes of the African bell. Shown below are the primary off-beat and on-beat strokes of both patterns. All five *Alegrias* accents align with the bell. Missing from the *palmas* phrase are the two off-beat strokes of the bell on beats one and four.



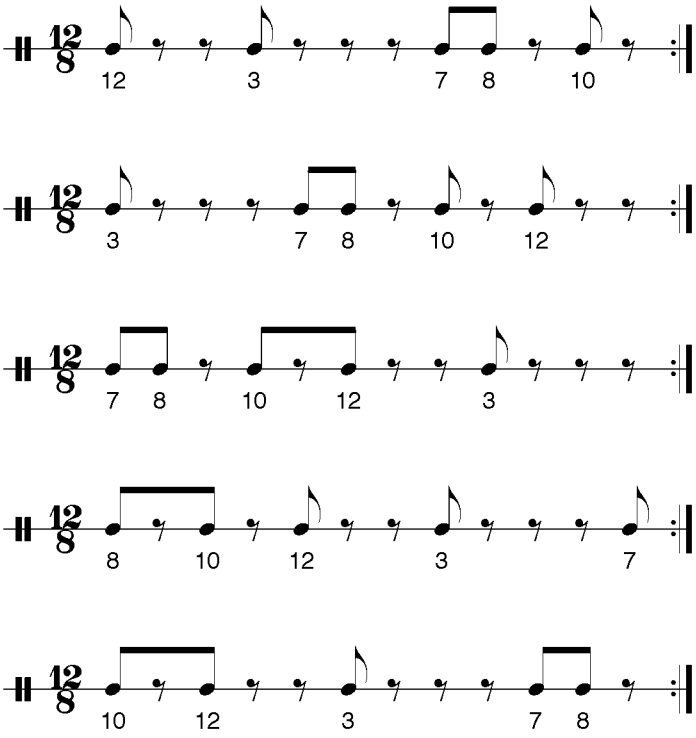
COGNITIVE PERCEPTION AND DOWNBEAT AMBIGUITY

Whereas the African bell pattern contains seven strokes and five rests, the *Alegrias* pattern contains five accented claps and seven unaccented claps. In this form, the relatively empty and "expanding cell" structure of *Alegrias* results in an intricate level of syncopation that could cause the pattern to flip/rotate in the mind of inexperienced "non-African" listeners and players. Downbeat ambiguity is a common phenomenon with cycling time line/clave-like patterns. The African bell pattern can flip with long (L) and short (S) strokes switching from L-L-S-L-L-L-S (5+7 structure) to L-L-L-S-L-L-S (7+5 structure).[6] Part of the beauty and complexity of world rhythm cycles is the potential to experience "downbeat culture shock."

Previous scholarly research, most notably by David Locke and Jeff Pressing, examined the possible rotations ("modes") of the standard pattern by moving the first stroke to the end of the phrase: L-L-S-L-L-L-S, L-S-L-L-L-S-L, S-L-L-L-S-L-L, L-L-L-S-L-L-S, L-L-S-L-L-S-L, L-S-L-L-S-L-L, and S-L-L-S-L-L-L. Each of these patterns represents different time line structures for other traditional rhythms.[7] A similar "modal/rotation" model can be applied to the *Alegrias palmas.* These rotations contain unique tension/resolution points, while also revealing what the ear might perceive as the downbeat to the music.

Aside from the previously examined traditional phrase and the African bell realignment, three other rotations of the *Alegrias* pattern are possible. In a traditional Flamenco context, the four rotations are not incorporated; in a contemporary setting, the performer/composer is free to explore any creative application. *Alegrias* numbers are included to identify the source of the original phrase. While engaging in these rotations, pattern familiarity with the original phrase will probably be diminished. Indeed, the inherent gravitational force of several rotations will sound unrelated to its origin.

Alegrias Rotations (eighth rests could be sounded using softer claps):



CONCLUDING REMARKS

There is much more to this analysis than interesting observation and cultural coincidence. By constantly challenging the existing paradigms, new resources and ideas can evolve. Pioneering music creations that pay respect to traditional roots, while exploring unusual instrument sound combinations and unique rhythm and melodic systems, result in what could be classified as "new world music."

ENDNOTES

1. Andulicia is located in southern Spain. There is ongoing debate regarding the degree of influence gypsies had on the development of flamenco. Other influences could be attributed to the Moors, Jews, Christians, and North Africans. World music traditions often evolve as an amalgam of many neighboring regions, with limited historical documentation to resolve the various conclusions.
2. The *cajon* is a folk instrument that originated in Peru and is a recent addition to the flamenco lexicon. In the 1970s guitar virtuoso Paco de Lucía toured Peru and was given a *cajon* as a gift. He brought it back to Spain where it underwent several modifications—the open hole on the side and the addition of tunable snares—to suit the flamenco sound.
3. The basic skeletal structure of *Alegrias* is discussed in this article. More highly syncopated *palmas* patterns are integrated in an actual performance.
4. This clapping, recitation and movement exercise was taught to me by flamenco guitarist Juanito Pascual. I regularly incorporate a similar three-tiered kinesthetic approach to learning African and Indian rhythm.
5. In vocal and dance music, the *Alegrias palmas* pattern usually begins just after beat 1, as a pick up leading into beat 3 (conversations with Juanito Pascual).
6. For more information on 12/8 timeline rotations and their application in other traditional rhythms see: "The Euclidean Algorithm Generate Traditional Musical Rhythms" by Godfried Toussaint, School of Computer Science, Centre for Interdisciplinary Research in Music Media and Technology, the Schulich School of Music, McGill University, Montreal, Québec, Canada.
7. Prior research of the African bell pattern and its transpositions/rotations has been conducted by Kofi Agawu, A.M. Jones, James Keotting, Robert Kauffman, Kobla Ladzekpo, David Locke, Alan Merriam, J.H. Kwabena Nketia, and Jeff Pressing, to name a few. See "Sources" below for the specific publications.

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Four-Mallet Sticking Options for Marimba

Part II: Advanced Techniques

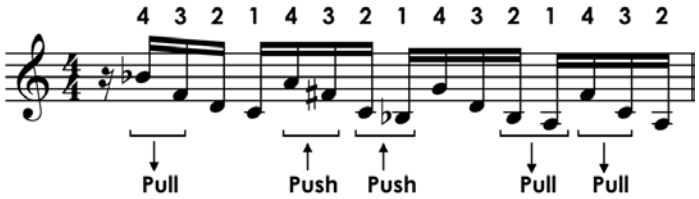
By Nathan Daughtrey

Part I of this article (*Percussive Notes*, December 2007) focused on defining and illustrating the five basic sticking options for four-mallet marimba performance and provided guidelines for determining such stickings. In order of difficulty, they are:

1. **Alternating Sticking:** right and left hands alternate every stroke;
2. **Consecutive Sticking:** groups of two, three, or four notes are played in ordered succession (consecutively) across the mallets;
3. **Double Sticking:** two consecutive notes are played by the same hand (double vertical) or the same mallet (independent);
4. **Plane Sticking:** each hand plays notes on a different horizontal plane (accidental or natural bars);
5. **Multiple Independent Sticking:** one mallet plays three or more notes (usually scalar motion) using an independent stroke while the other hand does something different.

Part II expands these basic four-mallet sticking options to cover advanced techniques and to provide exercises for further development. As in Part I, all topics in this article are discussed through the scope of Independent (or Stevens) Grip, and the mallets are numbered from 1 to 4, low to high (or left to right).

Example 1. "Caprice, No. 5" by Niccoló Paganini / Daughtrey, m. 24



PUSH-PULL TECHNIQUE: AN ALTERNATIVE

One may apply the definition of Consecutive Sticking to Push-Pull Technique: two consecutive notes in one hand moving from accidental to natural bar, or vice versa. The difference between Consecutive Sticking and Push-Pull Technique is in the physical arm position and motion used. Instead of changing arm/elbow position to accommodate successive natural/accidental bar combinations, the performer remains in a frontal arm and body position and pushes (moving from natural to accidental) or pulls (accidental to natural) the mallets away from or back toward the body.

To reduce the number of awkward arm/body position changes, one should use Push-Pull Technique in figures or passages that involve several combinations of naturals and accidentals. As seen in Example 1, Push-Pull Technique helps to maintain a particular sticking pattern in a melodic sequence. It is very important to play on the extreme edges of the accidental bars when using Push-Pull Technique.

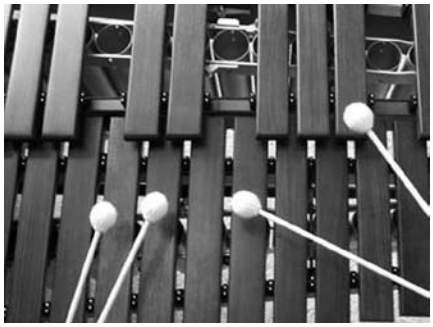
The question then arises, "How does one decide whether to use normal Consecutive Sticking (with changing arm positions), Push-Pull Technique (frontal position), or Plane Sticking?" It boils down to three factors:

Time: Is there time (dependent upon tempo and/or note values) to get into the proper arm/body position to perform a given passage? If yes, normal consecutive sticking would be appropriate.

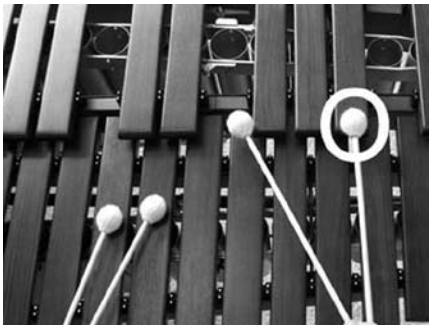
Frequency of Change: How frequently does the given passage (and selected sticking) require the performer to change arm/body position? If it is very frequent, Push-Pull or Plane Sticking would be most appropriate.

Melodic Sequence/Patterns: Is there a melodic sequence that would be aided by a corresponding sticking pattern/sequence? If yes, Push-Pull Technique, and possibly even Consecutive Sticking, would be most appropriate.

First four notes of Example 1:
Consecutive Sticking
(outward arm position)

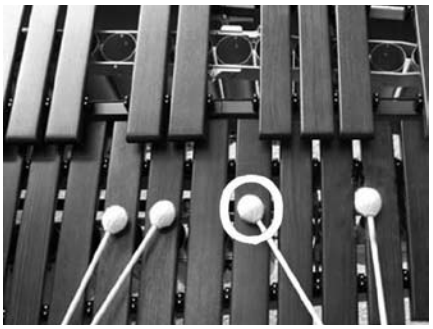


First four notes of Example 1:
Push-Pull Technique
(frontal arm position 1)



Pull

First four notes of Example 1:
Push-Pull Technique
(frontal arm position 2)



All three factors are interrelated and dependent upon one another for determining the most appropriate sticking for a given passage. The same concepts may be applied to performing scales and arpeggios as well.

SCALES AND ARPEGGIOS: UNNECESSARY PRACTICE?

Although we perform on a 20th-century instrument with primarily 20th- and 21st-century repertoire, adaptations and transcriptions of violin, cello, piano, and guitar works of past style periods require us to revisit tonal scales and arpeggios. We need to acquire the same dexterity, accuracy, and grace while performing a four-octave arpeggio on an eight-foot-long instrument as a violinist displays with the flick of a bow and flutter of fingers. Therefore, we need to be aware of the sticking options for performing such passages.

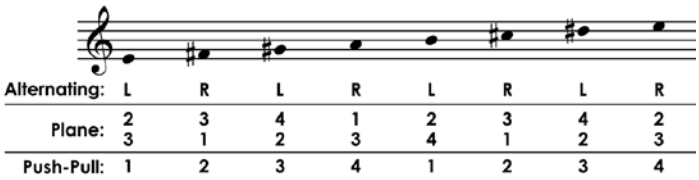
We now have three primary sticking options for performing scales and arpeggios.

- Alternating (inside and four-mallet)
- Plane
- Push-Pull/Consecutive

Scales

In determining stickings for scales, any one of these options will work. However, the performer will most likely favor one, or use a combination of the options depending upon the context. In Example 2, each of the three sticking options are applied to an E major scale.

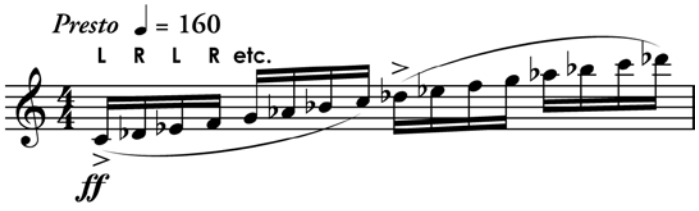
Example 2. Sticking options for E major scale



When playing scales with Plane Sticking or Push-Pull Technique, one needs to be proficient playing close-interval independent alternating and double lateral strokes.

Alternating Sticking for scalar passages is most appropriate for very quick figures, especially those played at a loud dynamic. For example, look at the passage from David Gillingham's "Gate to Heaven" shown in Example 3.

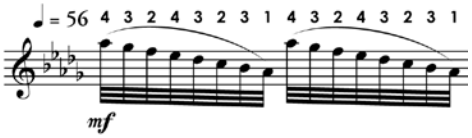
Example 3. "Gate to Heaven" by David Gillingham, m. 74



This scalar figure could be played with Plane Sticking, but to obtain the necessary dynamic, a great amount of rotary motion would be required, making it much more challenging to playing loudly and accurately.

Plane Sticking for scalar passages is most appropriate for softer, more legato figures. The passage shown in Example 4 from the second movement of Gillingham's "Concerto for Marimba and Wind Ensemble" falls in the middle of a long string of descending thirty-second notes.

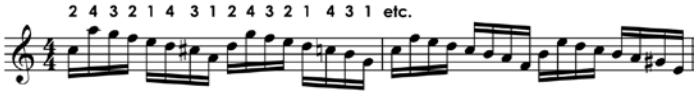
Example 4. "Concerto for Marimba and Wind Ensemble" by David Gillingham, Mvt. II, m. 21, b. 3–4



There are many sticking possibilities here, but using primarily Plane Sticking allows for very legato playing, a reduced number of strokes/wrist motions, and smooth transitions from the bottom of the scale back to the top of the next one.

Push-Pull Technique/Consecutive Sticking is best utilized in scalar passages involving melodic sequences for which you want to use a consistent sticking. The violin caprices of Paganini are filled with sequences and, more specifically, the "Caprice Number 5" is filled with scalar sequences, as shown in Example 5.

Example 5. "Caprice, No. 5" by Niccoló Paganini / Daughtrey, mm. 51–52



Using Push-Pull Technique to accommodate sticking/melodic sequences best serves the music in this case by bringing out the intended musical lines.

Finally, to show that none of these scalar sticking options exist in a vacuum, a longer passage from the same section of the second movement

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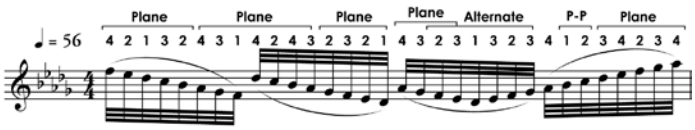
of Gillingham's "Concerto for Marimba," shown in Example 6, reveals the necessity of allowing the three options to live in harmony.

Example 6. "Concerto for Marimba and Wind Ensemble" by David Gillingham, mm. 22

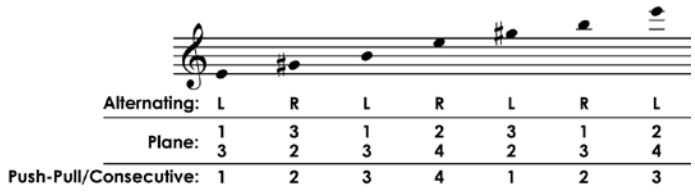


Notice that Plane Sticking is employed for most of the passage. The different segments of Plane Sticking show where the hands switch roles from accidental to natural bars, or vice versa.

Arpeggios

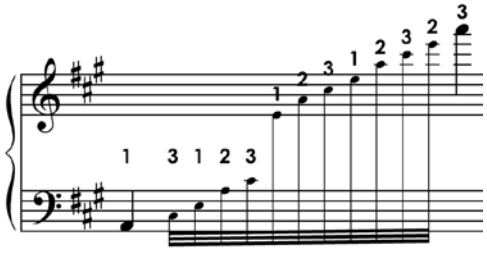
The same sticking options of Alternating, Plane, and Push-Pull/Consecutive can be applied to arpeggiated passages as they were for scalar passages. Since the requisite intervals for arpeggios are wider than those used in scales, it is unnecessary to employ alternating sticking as frequently.

Example 7. E Major arpeggio sticking options



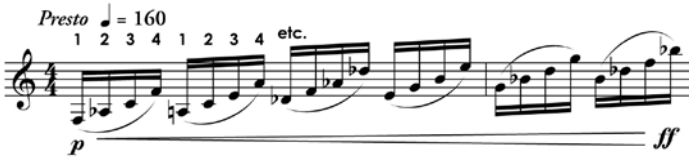
Plane Sticking is typically the most logical option for performing arpeggios, since there are usually two consecutive notes on the same plane followed by one note on the other plane, evident in Example 7. Paganini's fifth violin caprice begins and ends with rapid ascending arpeggios, which are easily accomplished using Plane Sticking, as shown in Example 8.

Example 8. "Caprice No. 5" by Niccoló Paganini / Daughtrey, final measure



However, arpeggios do not fit quite so neatly in a box. As with scalar passages, melodic sequences/patterns might help to dictate the sticking. In another section of Gillingham's "Gate to Heaven" there is an ascending sequence of arpeggiated chords that is most easily played with Push-Pull Technique, as shown in Example 9.

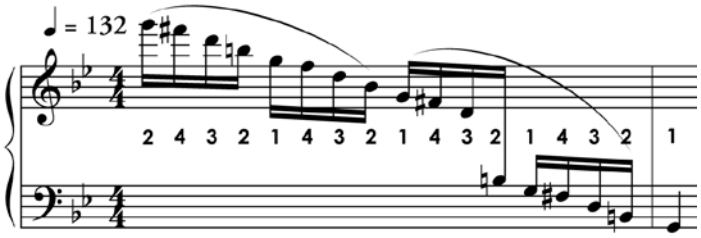
Example 9. "Gate to Heaven" by David Gillingham, mm. 206–207



One could use consecutive sticking and change arm position throughout the passage, but remaining in a frontal position with Push-Pull Technique decreases awkwardness and inaccuracy.

A performer can make a case for Consecutive Sticking in some arpeggiated passages, especially 7th chords, as in the final two measures of the first movement of Gillingham's "Concerto for Marimba," shown in Example 10.

Example 10. "Concerto for Marimba and Wind Ensemble" by David Gillingham, mm. 244–245



In this case, the performer would face the instrument at a slight angle toward the lower end of the marimba so that the F-sharp and D in the right hand are played using a frontal arm position. This allows one to practically walk from the upper end to the lower end in a very comfortable manner.

CONCLUSIONS

The majority of this article centered on introducing Push-Pull Technique as a possible alternative to some of the other sticking options we have available. Remember, when you are first trying to determine the sticking for a certain passage, be it scales, arpeggios, or anything else, start by going through each of the five basic four-mallet sticking options and decide which combinations of each will best serve you and the music. Then, decide whether Push-Pull Technique would be useful in conjunction with the sticking options you chose.

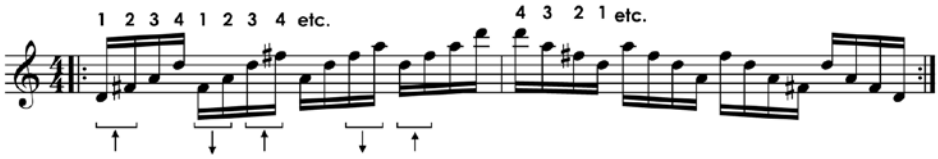
The information presented here is not meant to be all encompassing, but rather an impetus to propel the marimba and its technique into the future. All are encouraged to experiment with new sticking options so that our instrument can continue to grow to its full potential. Use the following supplemental exercises to become more comfortable playing with Consecutive Sticking, Push-Pull Technique, and Plane Sticking on scales and arpeggios.

EXERCISES

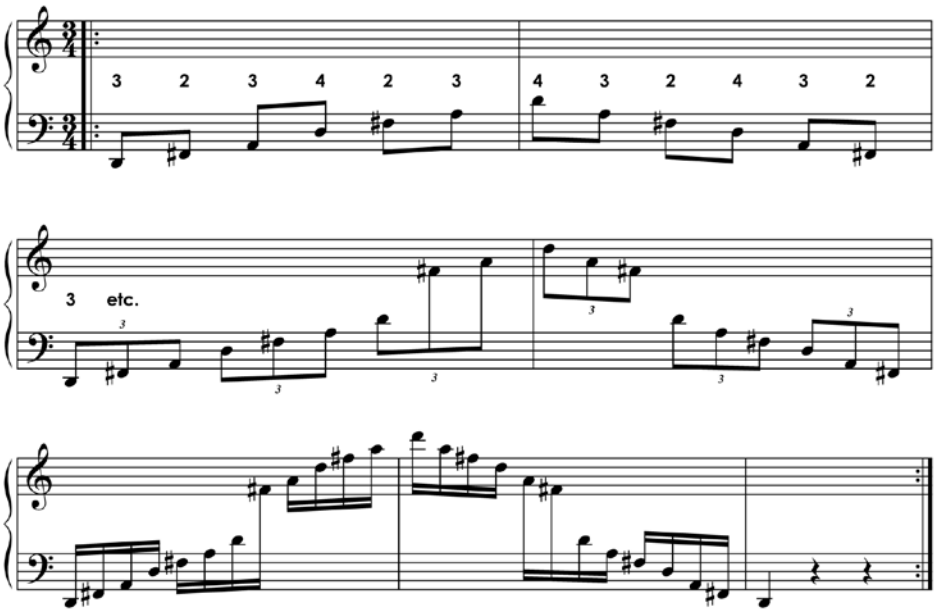
Scales

Starting at a very slow tempo, play through each of the 12 major scales with close intervals in each hand using 1. Consecutive Sticking (with changing arm position), 2. Push-Pull Technique (in frontal position), and 3. Plane Sticking. As each option becomes more comfortable, gradually increase the tempo. Strive for evenness of tone throughout each scale so no individual note sticks out more than another. In other words, view each scale as a long musical line with a legato marking over the passage.

Exercise 1. Consecutive Sticking/Push-Pull Technique



Exercise 2. Plane Sticking



Arpeggios

Exercise 1. Consecutive Sticking/Push-Pull Technique

Play through each of the 12 major-key arpeggios using the sticking permutation outlined in Exercise 1. Start with a very slow tempo until you are comfortable with the technique, then gradually increase the tempo.

Exercise 2. Plane Sticking

Play through each of the 12 major-key arpeggios using Plane Sticking. The D Major arpeggio is provided below, but the sticking will not apply to all other keys. As a general rule, play any two consecutive notes on the same plane in one hand and notes in the other plane with the other hand. For arpeggios in keys that remain on the same plane throughout, I recommend the following sticking permutation: 1-2-3-4-2-3-4-etc. Again, start with a very slow tempo until you are comfortable with the technique, and then gradually increase the tempo.

MUSIC EXAMPLES

Dr. Nathan Daughtrey is a freelance percussionist and composer based in Greensboro, North Carolina, where he also performs with the Greensboro and North Carolina Symphony Orchestras. He holds degrees from the University of North Carolina at Greensboro, where he also taught as a Visiting Lecturer in Percussion. He has appeared nationally and internationally as a soloist and clinician, and has also been involved in many recording projects, including his own solo marimba CD, *Spiral Passages*, and his upcoming second CD. As second- and third-place winner of the 2005 PAS Composition Contest, Daughtrey is also very active as a composer, with his band and percussion works being performed worldwide. His compositions are published by C. Alan Publications. He was recently invited to serve on the PAS Composition Contest Committee. PN

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Continuing Improvisation in the Western Music Tradition for Mallet Percussionists

By Gustavo Agatiello

Improvisation is innate to human beings. When children learn a language, they first listen and imitate. As they gain new vocabulary they start to express themselves spontaneously. As adults we improvise daily, in reaction to a challenge, between long practiced routines, or even when making dinner. Improvisation is an essential ingredient in our evolution.

Surviving historical documents provide evidence that improvisation has been present in the western music tradition since music was first chronicled.

> Independent instrumental music, in the form of dances, fanfares, and the like, has not come down to us apparently for the reason that it was always either played from memory or improvised…
>
> Even so, the written and printed documents do not by any means preserve all the instrumental music of the Renaissance, since there was still a great deal of improvisation; and much of the notated instrumental (as well as some vocal) music of this period was elaborated in performance by improvised embellishments… One sign of the sixteenth century's growing regard for instrumental music was the publication of books. The first such publication was in 1511… Most of these books were written not in Latin, but in the vernacular; they were addressed not to theorists, but to practicing musicians. From them we can learn some of the problems of pitch, temperament, and tuning in this period, and can observe the importance to improvising ornaments on a given melodic line.
>
> Many characteristically instrumental traits crept into music through improvisation; later these traits were written into music, whether manuscripts or printed. The sixteenth-century performer improvised principally in two ways: by ornamenting a melodic line, or by adding one or more contrapuntal parts to a given melody, such as a plainsong. The latter practiced by singers, was called *discantus supra librum* ([extemporized] discant on [a melody written in] a choir book); this was also called *contrapunto alla mente* (literally, mental counterpoint) or *sortisatio* (extemporization as opposed to *compositio*, or written composition), and was regarded in the early sixteenth century as an important discipline in a musician's training.
>
> The chief form of keyboard music in improvisatory style in the latter part of the century was the *toccata*. This word comes from the italian *toccare* (to touch) and carries the suggestion of an organist improvising at the keyboard. The toccatas by Venetian organist Claudio Merulo (1533–1604) certainly give this impression.
>
> Improvisation upon a tune as an accompaniment to dancing must have ancient roots. Written-out variations on Venetian and Ferrarese pavane tunes appear in the lute tablatures of Joan Ambrosio Dalza published in *Intablatura di lauto* (Venice, 1508). A related practice was the improvisation and composition of variations on short ostinato patterns, such as the *passamezzo antico* and *moderno*, both deriving from the pavane. These were the prototypes of the later chaconne and passacaglia.[1]

It would be hard to imagine that great composers like J.S. Bach, Haydn, Mozart, Handel, Beethoven, Schumann, Chopin, Ravel, and Debussy wouldn't have followed in their predecessor's steps. Moreover, considering the relatively short life of some of these composers, it would have been virtually impossible for them to create such a large and highly crafted body of work without a fine command of improvisation.

Improvisation is, in fact, a form of composition—more specifically "spontaneous composition." Improvisers and composers work with the same tools. The difference between the two lies in the "process" itself. A composer could take three months to create three minutes of music, whereas an improviser creates three minutes of music in three real-time minutes. We may call the improviser's compositional process a "spontaneous creative process."

It isn't enough for a good improviser to envision a musical idea ahead of time; he or she needs to also be able to react to unexpected turns and to generate and formulate new ideas on the spot, while striving to achieve a meaningful result.

The challenge for an aspiring improviser is to learn to channel the skills of a good composer through the spontaneous creative process. It is, therefore, important to listen to, play, and study the work of great composers. By playing and analyzing both small and large-scale compositions we can absorb the composer's techniques and how they are applied to:

- the construction of effective melodies and counter-melodies;
- the creation and development of rhythmic motives, melodic motives, and accompaniments;
- the use of articulation and dynamics.

It is just as essential to listen to recordings and to attend live performances of accomplished improvisers. This gives us the chance to witness the "spontaneous creative process," during which the musician applies all of the above-mentioned techniques while reacting to unforeseen events—perhaps feeding off ideas played by other musicians (in the case of group improvisation), or possibly recovering from and building upon an element that might have been initially perceived as a mistake.

Nowadays, there are plenty of opportunities to hear highly accomplished improvisers, some of who work within music genres less related to the western music tradition, but many of who work within genres derived from the western music tradition, as in the case of jazz, American popular song, and some Latin American popular and folk genres.

A consistent result through the "spontaneous creative process" doesn't happen overnight. A musician's ability to improvise and compose improves progressively with study, practice, and experience. At a certain point, we will acquire enough tools and knowledge to achieve a consistent standard of performance.

It is vital that we nurture the spontaneous creative process on a daily basis. The best way to start is by working on a familiar piece of music. It doesn't matter how simple it may be. Whatever concept we work on during this "process" must always be within our comprehension, whether we are working at an elementary, intermediate, or advanced level. If we approximate an idea and feel that we

barely touched it, we will ultimately be led into confusion and frustration.

> It is true of any subject that the person that succeeds in anything has the realistic viewpoint at the beginning in knowing that the problem is large, that it has to be taken a step at the time, and that the step-by-step learning procedure has to be enjoyed.[2]

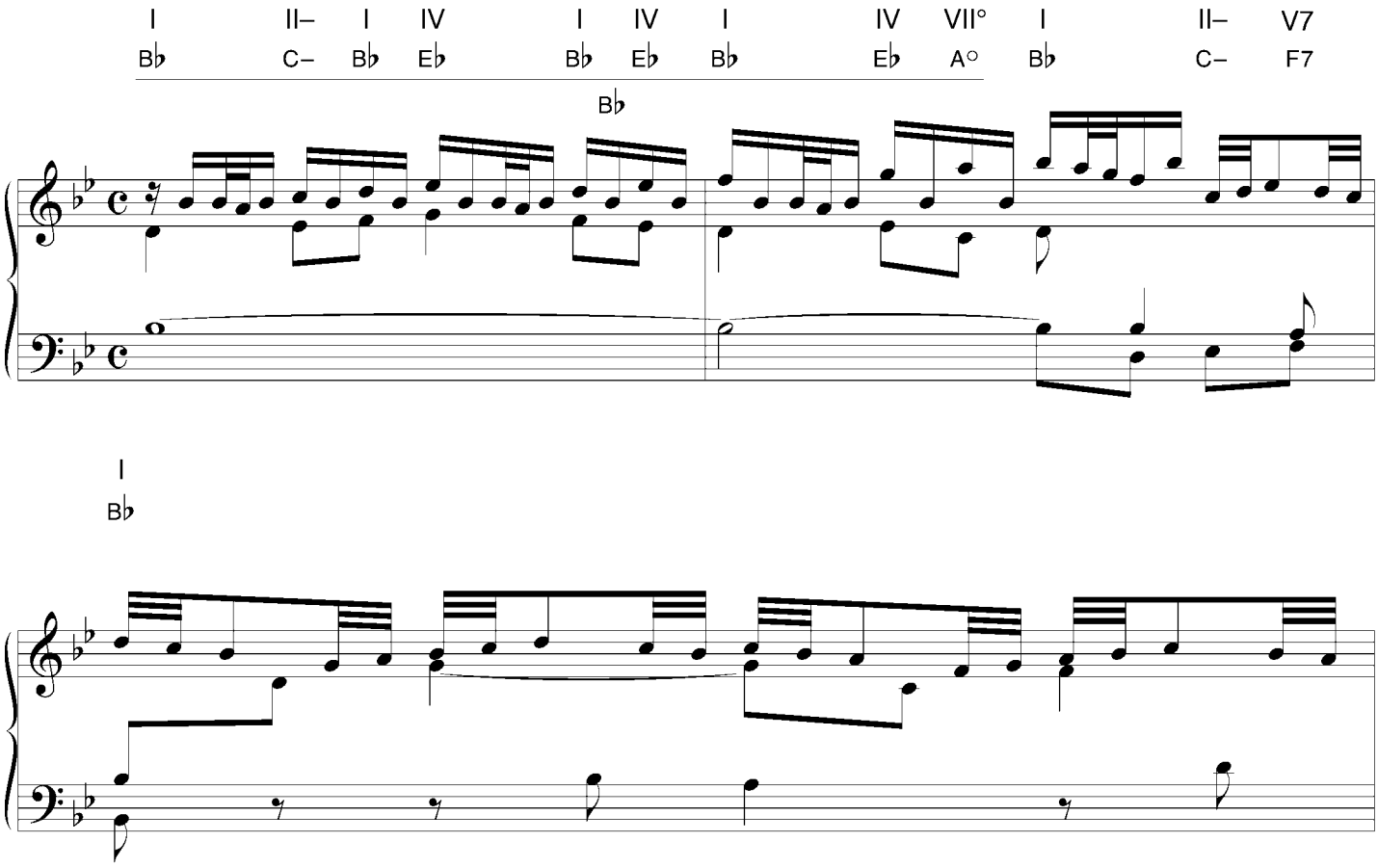
I will use the first two measures of the "Preambulum" in the "Keyboard Partita No. 1" by J.S. Bach to demonstrate a few techniques that will help create and/or develop an improvisation. The techniques presented here can be applied to both vibraphone and marimba, though the examples were executed keeping in mind the keyboard range of a standard vibraphone.

Example 1 shows the harmonic analysis of the excerpt. Bach wrote a B-flat bass pedal (tonic pedal) through the first and second measures. As improvisers, we can choose to use that pedal or to leave it out. By looking at tones that coincide vertically we can realize the harmony. If we ignore the B-flat bass pedal we can see how some chords are not in root position, but rather in their first inversion (third of the chord as the lowest tone). We can make note of that if we choose by labeling the C– in measure one C–/Eb (C-minor with an E-flat bass). Note that some of the I chords (B-flat) can also be interpreted as III– (D–, a substitute tonic sound). The reason I choose to see them as I chords is because all of the adjacent notes are B-flats, and therefore we will hear them as B-flat sonorities. But again, for improvisational purposes we are free to interpret them as III– chords.

It is important that we identify the harmonic functions (written in roman numerals), as it is an essential guide to the improviser. By internalizing the harmonic functions we start to think more like a composer, and we become aware of various types of cadences, modulations, and key centers. When we feel at ease with the harmonic progression, we can transpose it to different keys. The more we transpose, the better we become at retaining harmonic functions, their gravitational tendencies, and their sound.

Once we have identified the harmony and the harmonic rhythm (the rhythm in which the chords move) we may play the sequence of chords on our instrument, while keeping the melodic contour of the original

Example 1



melody; Example 2 shows an improvisation of mine following these guidelines. As we move through the chord progression we should, whenever possible, make smooth transitions between chords by moving each of the voices by the smallest available interval and maintaining common chord tones. This technique, called voice leading, is conducive to playing a triad in its three forms: root position, first inversion, and second inversion. We will soon realize that the triad in root position is the most stable, followed by the first inversion triad (third in the bass), and the least stable being the second inversion triad (fifth in the bass [particularly when dealing with the *tonic* chord]).

Example 3 is an improvisation on the same progression. I once again tried to keep the original melodic contour, but this time I added embellishments to all four voices. I used diatonic (B-flat scale) and non-diatonic (chromatic) approaches. Some of these approach notes are placed on strong beats, resulting in appoggiaturas. The Roman numeral analysis in parenthesis shows some of the harmonies created as a result of the melodic embellishments. During the first beat of the second measure I took more liberties (see second voice down from the melody) and created a new color.

In my last improvisation (Example 4) I used a technique borrowed from "Prelude 1, Book I" of *The Well-Tempered Clavier* by J.S. Bach. I applied the borrowed arpeggio-like pattern to the harmonic sequence we are dealing with. I kept both the melodic contour and the B-flat bass pedal from the original "Partita." The repetitive rhythmic nature of this technique lends itself to a fluid improvisation, but would also be suitable as an accompaniment.

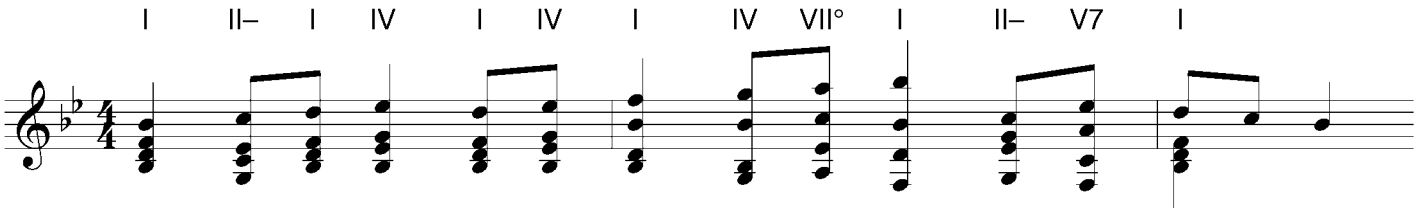
I have demonstrated just a few of the endless possibilities available to us. I encourage you to study the classics, isolate techniques you like, and practice them consistently so that you may absorb them and consequently apply them through the spontaneous creative process.

ENDNOTES

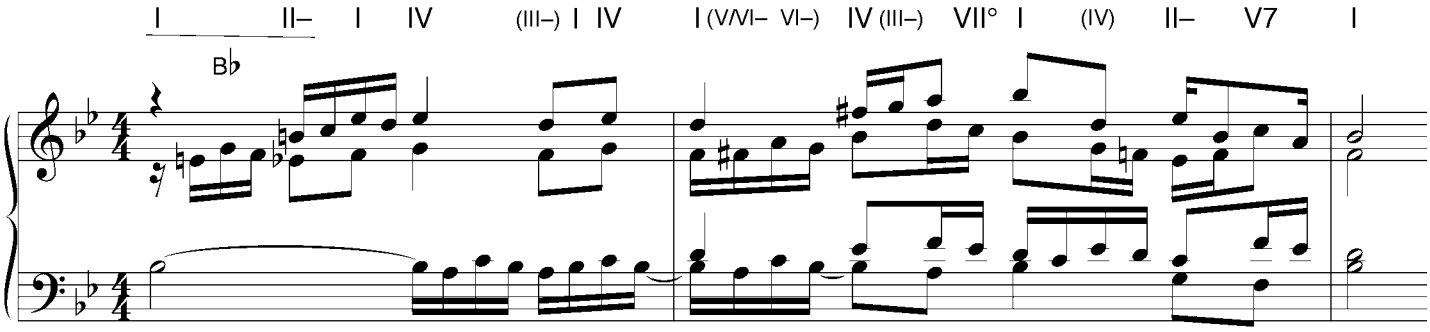
1. *A History of Western Music* by Donald J. Grout and Claude V. Palisca, pp. 285–286, 295–297.
2. *The Universal Mind of Bill Evans*, 1966 interview/documentary footage.

Gustavo Agatiello is an active vibraphonist living in Boston, Massachusetts. He studied at Escuela Nacional de Musica, Rosario, Argentina, and is a graduate of Berklee College of Music. He has worked throughout Argentina, Brazil, the USA, and Europe. Gustavo teaches vibraphone, piano, drumset, improvisation, and music theory.

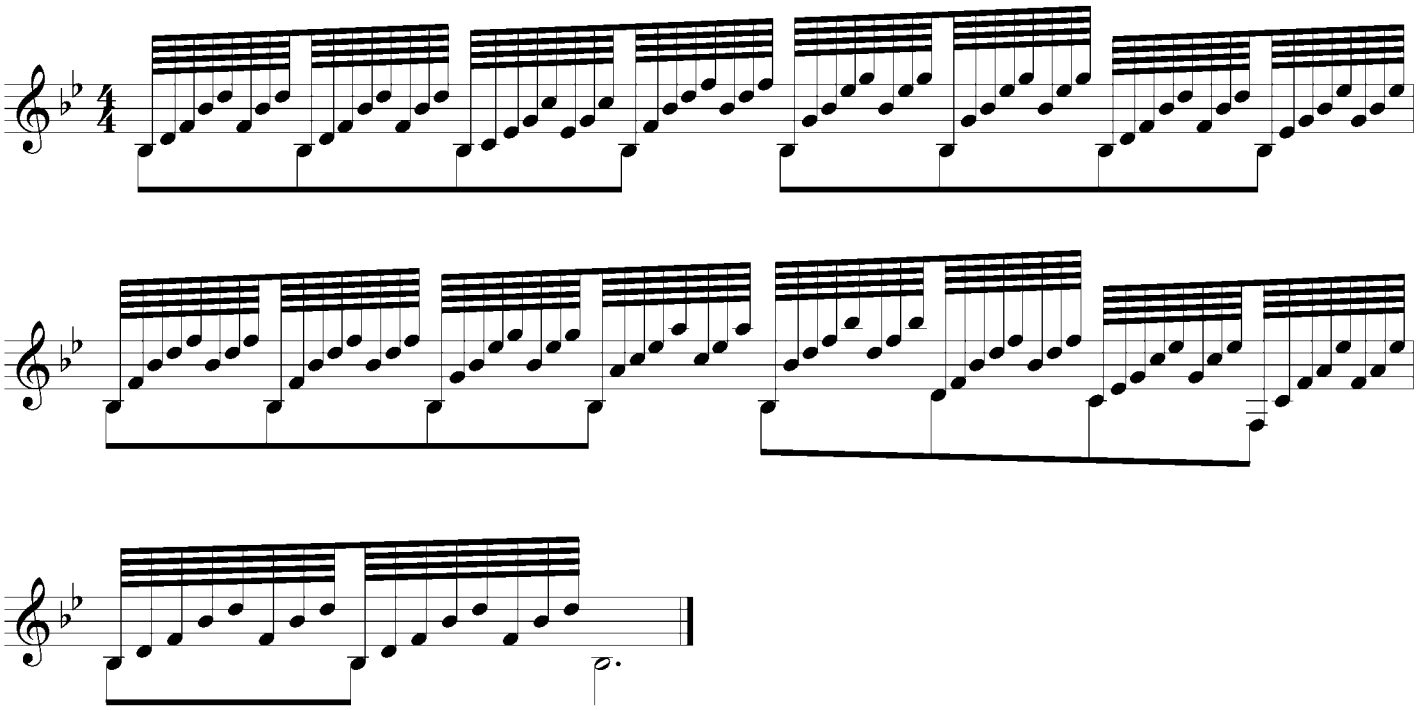
Example 2



Example 3



Example 4



PN

Ron Vaughn, a Percussion Entrepreneur

By Jack Gilfoy

The dictionary defines an entrepreneur as a person who sets up and finances a new commercial enterprise to make a profit. If you would rather not work for somebody else, it's nice to do your own thing—literally create your own career. But you must have an idea, define your goals, be willing to work very hard, take the risk of operating a business, and never give up.

Successful musicians are usually entrepreneurs. The music world offers abundant opportunities for entrepreneurs who can "think outside of the box." In Ron Vaughn's case it was perhaps more a matter of building a better box.

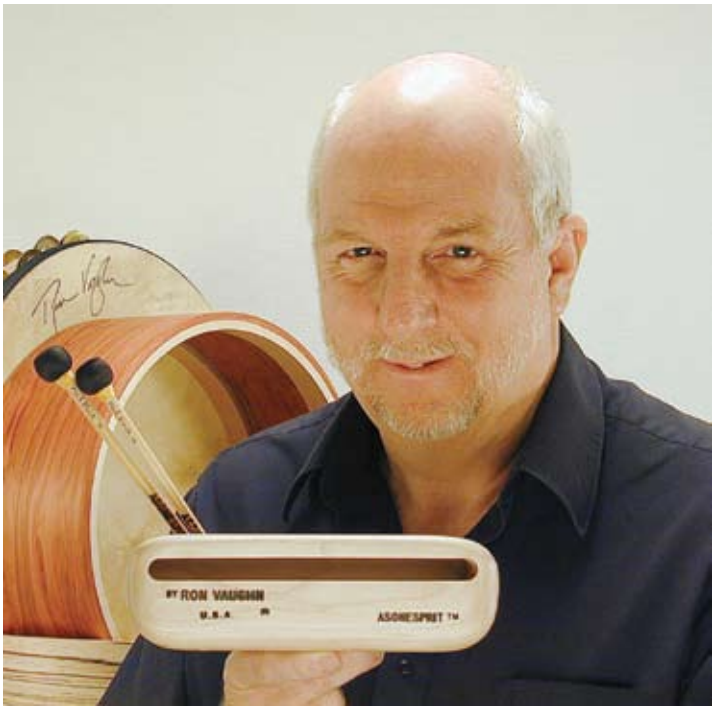
Born and raised in Kansas City, Ron was given his first (toy) drum when he was two years old. Next came some real sticks. Ron's dad was a big music lover, and at a very young age Ron was seriously listening to Louis Armstrong, Count Basie and Dizzy Gillespie. Finally (fifth grade) Ron was able to join the school band program and get a real drum. To say that Ron was "hooked on drums" was an understatement. He borrowed all the drum books he could find, wanting to learn everything. And he began building his first drumset.

By junior high Ron was studying with local teacher/player Bill Zickos, as well as successfully going to the state solo contests. While in high school Ron was asked by the University of Kansas to play drum solos at the halftime of basketball games. "I was living my dream," Ron says. And it was while still in high school that Ron began playing professionally with established Kansas City artists like jazz singer Marilyn May.

In 1970, when it was time to go to college, Ron was offered several fine scholarships. He chose the School of Music at Indiana University, Bloomington. Professor George Gaber had begun a percussion program there in 1960. By 1970 Gaber's outstanding efforts were internationally recognized. "George Gaber opened the world of percussion and international music to me in the most stunning and thorough ways," Ron says.

There was also an outstanding jazz program at IU led by David Baker, and Vaughn played in Baker's jazz band. "I played everything I could when I was in Bloomington," Ron recalls. "My musical horizons exploded." He played in jazz trios, wind ensembles, avant-garde presentations, operas, ballets, and, of course, Gaber's percussion ensemble.

Based on the Saul Goodman sticks that Gaber wanted all of his students to use, Ron started making his own timpani mallets, some from African padauk, some from hard maple and hickory. Gaber took a look and said, "Not bad!" More mallets were made *and sold*, first to colleagues, but the word spread outside of Bloomington. That was the beginning of Vaughncraft. The advertising was a rubber stamp and word of mouth.



As a youngster Ron had been exposed to the vibraphone as played by Lionel Hampton and Milt Jackson from his father's record collection. In 1971 another promising percussion student at IU was Bill Molenhof. Bill's enthusiasm for the vibes got to Ron, who was heard practicing the Bach "D Minor Chaconne" on the vibraphone one day by Joseph Gingold, IU's famed violin teacher. Gingold liked what he heard and accepted Ron for some lessons. Gingold would sometimes say, "If Bach had known about the vibraphone, we would have a lot less violin music today." That "Chaconne," along with other pieces, eventually got Ron a coveted Performers Certificate from IU.

A benefit of being at the IU School of Music in the 1970s was the outside gigs. There were several regional orchestras, and Ron was hired to play concerts with the Owensboro (Kentucky) Symphony. Ron was one of hundreds of musicians who freelanced for a local contractor, Al Cobine, playing concerts and tours with artists such as Bob Hope and Johnny Mathis. The touring and "real world" performance work lengthened the time it took Ron to complete his IU degree work. "For me," Ron explains, "it was a careful and disciplined path that culminated in tremendous results. And those results continue to this day to powerfully fuel my life and work."

Around 1974 Ron accepted a percussion and timpani position with the Venezuelan Philharmonic in Caracas, Venezuela. During his time there he was able to renew a close friendship with the famed timpanist of the Cleveland Orchestra, Cloyd Duff, while that orchestra was on a tour of South America. Eventually Ron and Cloyd made some mallets and wrote a book on how to make mallets, and they also did timpani clinics together. Also while in Venezuela Ron got to do some concerts and TV shows with jazz drummer Elvin Jones and play with some very authentic folkloric bands.

Upon returning to the U.S. in 1976, Ron began to think seriously of where to establish a base of operations. The musical variety and challenges of studio work appealed to him the most. He packed his bags and took a flight to Los Angeles, but as the plane cut through the clouds over L.A. Ron saw the air pollution and quickly started looking elsewhere.

Ron Vaughn, circa 1965

He decided to try Nashville, known as "Music City," and as soon as Ron arrived there he was befriended by legendary studio percussionist Farrell Morris. Soon an assignment came up to do some recordings for the Smithsonian series of American music. Ron needed some really good sounding woodblocks for those sessions. Thus was born the wide-slot solid woodblock for which Vaughncraft became internationally known. In the business community, the saying "find a need and fill it" is well known. Such would prove to be the case here. Ron was invited to his first PAS convention in 1977, and his Nashville blocks were an instant hit.

Ron says that at this point, "I began turning my attention toward more sounds I could create. This is where my original high-density mallet designs came from. I also began working with other players, helping them find the sounds they were looking for. My original studio tambourines began during these years. I began applying myself to engineering, metallurgy, and continuing my solid wood bending and forming interest from my childhood."

At one point Ron made a lot of tambourines with solid wood shells for Kenny Rogers to give away at concerts. "We did it over and over, just like practicing scales, arpeggios, rolls and rudiments," Ron says. "We were learning all the time, and we got good at it."

Ron continued to develop his solid shell wood bending study and processes, learning what works and what doesn't work with different woods, like pitch matching. Eventually Ron began providing design work and/or component parts or complete instruments to such companies as Ludwig, Slingerland, Pearl, LP and DW, some of who also bought solid steam-bent drums shells from Vaughncraft when Ron owned and operated the company.

Vaughn moved back to Kansas and sold Vaughncraft in 2004. His new company is Asonesprit Percussion by Ron Vaughn (www.asonesprit.com). Ron gave a lot of thought to this name. In today's world, branding is a very important aspect of marketing anything. If you can come up with a name that people will remember, and if it can also really mean something, you have done your job well. The "A" announces the name, "son" is French for "sound" and "esprit" is a French term meaning "with character, brilliance and intelligence." Phonetically the name spells and sounds in four syllables: "Ah-sone-eh-spree."

"Our primary focus is on the next generation percussion instruments and related processes I have developed so far in my career," Ron says, "and to embrace all things new, as always. We are releasing the next generation of woodblocks and mallets now, with more products in the pipeline."

As an entrepreneur, Ron has understood and successfully dealt with his own career in music by creating a unique niche for himself, always positively seeing the opportunities that life can present. He has contributed to the music world and society in general using all the possibilities that came his way, leaving no stone unturned.

"Have vision and courage," Ron advises. "Live your dreams. Take time to find what you really want, make your plans, and dedicate yourself. Live well and respect others, and the world and the people in it will beat a happy rhythm and a path that leads straight to your door."

If you know a percussionist who has had an interesting career full of changes and dealing with the music business, or if you are such a person yourself, please get in touch with Jack Gilfoy for a future Career Development article at jgilfoy@aol.com.

Jack Gilfoy is a drummer, bandleader, educator, and producer in Indianapolis, Indiana. Jack was the first jazz drummer to complete the percussion program at Indiana University, developed by George Gaber, and he holds BM and MS in Education degrees from IU. Jack also studied jazz drumming with Shelly Manne and Joe Morello. In 1965 Jack started touring as the personal drummer for Henry Mancini, an association that lasted until Mancini died in 1994. Jack has also performed with Teddy Wilson, Erroll Garner, Doc Severnsin, Randy Brecker, Jamey Aebersold, Larry Elgart, Nelson Riddle, Tommy and Jimmy Dorsey, Andy Williams, Johnny Mathis, Nancy Wilson, and Elvis Presley. Since 1965, Gilfoy has been involved as a teaching artist with Young Audiences of Indiana. In 1988 Gilfoy started teaching at Indiana University (Bloomington and Indianapolis). His current title is Director of Jazz and Music Business Studies, IU School of Music, Indianapolis (IUPUI). Another long-standing part Gilfoy's musical life has been recording and producing concerts and recordings. PN

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$14.07
Gerard Billaudot Editeur
This is a collection of nine orchestral excerpts for snare drum and piano. Each excerpt is less than a minute in length. The excerpts are taken from "Cappriccio espagnol," "Scheherazade," "Nocturnes"(Fetes), "Le Prince Igor," "La Dame de Pique" and "Le Roi d'Ys." Although not recommended to replace working with a variety of recordings and interpretations, this collection nonetheless is a novel presentation of the traditional excerpts.

—John Baldwin

KEYBOARD PERCUSSION

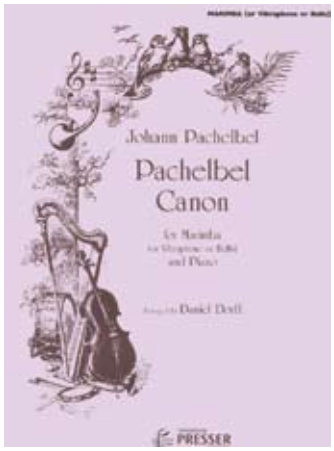
Graded Pieces for tuned Percussion, Book 1 **I–III**
Gordon Hughes
$55.95
Rhythmscape Publishing
This book is a full-service guide to learning the basics of two-mallet keyboard percussion performance. It includes a CD that contains complete recordings of each piece in addition to play-along piano accompaniment tracks. The publisher's Website also offers complete program notes and an educational guide for students.

There are 14 miniature pieces in the book and each progress in difficulty. The pieces are written for specific instruments (marimba, xylophone, vibraphone) with options and related adjustments listed as well. The technical and musical progression of each piece is one of the best features of the book. The first piece simply includes quarter notes and half notes and spans an interval of a fifth. The second piece adds eighth notes and spans an interval of a sixth. The range continues to increase in each piece as does the musical content. There are individual pieces devoted to rolls and double-stops, and the vibraphone pieces contain some mallet dampening options (however, no pedal indications are included).

The musical content of the pieces is rich with different keys and tempos, phrase markings and staff expressions, repeated sections and through-composed options. The only drawback of the book is the high price. This collection is a welcome addition to the beginning keyboard percussion repertoire because it offers significantly more information than a typical two-mallet transcription. For teachers of younger students, or college professors needing freshman sight-reading material with accompaniment, this is an excellent purchase.

—Julia Gaines

Pachelbel Canon **III**
Arr. Daniel Dorff
$4.95
Theodore Presser Co.



This rendition of the Pachelbel "Canon" is worth consideration. It comes with a two-page marimba solo part and a four-page piano accompaniment. The marimba part needs only a basic two-mallet technique and the most difficult passages are sixteenth notes at a quarter-note speed of 72 bpm.

The biggest challenge here is that because this is such a well-known and very tonal work, the performer is totally restricted to complete note accuracy. However, this setting of the work seems to work well for marimba and piano, and it might suit the younger intermediate performer.

—F. Michael Combs

Voyages... **III–IV**
Didier Benetti
$42.02
Gerard Billaudot Editeur
This is a collection of 20 pieces for various keyboard percussion instruments and piano. The individual pieces are short (:50 to 2:53), with most being around one-and-a-half minutes or so. A wide variety

of keys, tonalities, meters, styles and tempos are used. Dynamics are clearly marked. Some implied vibe pedalings are indicated by phrase marks. Two mallets are used throughout, with some double-stops included. All performance directions are given in French and English. The piano accompaniment also seems to be of an intermediate level. The pieces could be grouped into suite-like configurations or performed individually. They would be appropriate for intermediate junior high or high school recital or festival performances.

—John Baldwin

Rosebush **IV**
Brett E.E. Paschal
$12.95
HoneyRock
"Rosebush" is a five-minute marimba solo based on Paschal's own improvisations. After a brief opening chorale, the work jumps into an A-Phrygian groove. The left hand plays a rhythmic ostinato (two dotted eighths, eighth-note) while the right hand plays a syncopated line above. The rhythms remain constant in both hands while the upper melody line provides harmonic motion above the ostinato.

After an A-section repeat, the work dies down to a much slower B-section. A pause is taken to allow the performer to hold three mallets in the left hand and one or two in the right. The same, but slower, ostinato rhythm is played in the left hand with simple root position and second inversion a-minor and d-minor triads, respectively. The melody line is a slower variation of the A-theme.

A cadenza provides a carefree transi-

tion to a repeat of the A-section and energized coda. Several sections are notated for optional improvisation. Once players work out the hand-to-hand syncopations, they will enjoy the light-hearted nature of "Rosebush." Technical challenges include several one-handed rolls, quick single-alternating strokes, and rapid single-independent strokes with the inner mallets.

—Brian Zator

La valse du C37 **IV**
Jean-Claude Gengembre
$8.50
Gerard Billaudot Editeur
Lasting about two-and-a-half minutes, this solo work for marimba is a waltz with a constant dotted-half-note at 56 bpm. With the exceptions of one *ritard* and one *meno-mosso*, the tempo remains steady throughout. The piece is structurally in a large ABA form, opening and closing with a lyrical melody played in the right hand supported by a basic vamp accompaniment in the left hand. The middle section consists of nicely phrased flowing sixteenth notes, and the repeated A section is simply a DC followed by a short coda. The A sections gravitate around g-minor with the middle (B) section being in G-major. There are several low F-sharps below the staff in bass clef to necessitate at least a 4.5-octave instrument for performance (some careful editing might possibly allow for a performance on a 4 1/3 octave instrument).

Even with the many musical nuances indicated in the piece, the creative marimbist could go even farther in developing this work into a very accessible composition with its display of musicality.

—F. Michael Combs

5 Pieces for Vibraphone **V**
Richard Muller
$8.98
Gerard Billaudot Editeur
The five short pieces in Richard Muller's collection of vibraphone solos are written in a variety of styles. The first, "Papier dore," has an improvisatory feel with meandering melodic material that begins as a single line, but gradually picks up accompanimental material. The second piece, "Albatros," is written in a jazz style with syncopated melodic figures in the upper voice, punctuated by chordal figures underneath. "Chat bilingue" is a waltz that requires fairly advanced left- and right-hand independence due to the frequent oblique motion of melody and accompaniment. The left-hand parts to this waltz are also challenging in their own right with quick interval changes and some arpeggiated linear figures. The fourth piece "Homme orchestre," is also set in a jazz style, but includes improvisatory, cadenza-like passages not found in the second piece. The final movement, "Clé du bonheur," begins with slow rhythms, but quickly picks up pace as the activity becomes denser. Rapid sixteenth-note figures are alternated with eighth-note passages that feature parallel harmonies. The activity gradually slows, ending on a satisfying F-major chord.

Overall, "5 Pieces for Vibraphone" requires an accomplished keyboard musician. Few dynamic and pedal markings are indicated, leaving it up the performer to make these decisions. At less than ten minutes in length, these works would be suitable for an undergraduate recital.

—Scott Herring

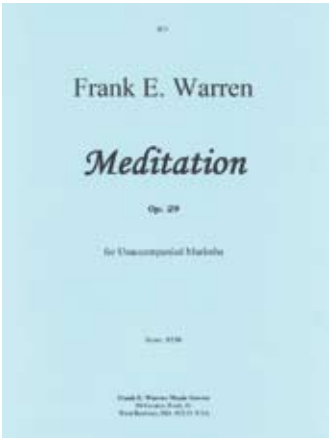
Facets **V**
Scott Johnson
$14.00
Upbeat Music Publications

This one-movement, unaccompanied keyboard percussion composition is written for a low-A marimba. It is structured with three contrasting sections. The solo opens with a warm chorale consisting of sustained chords, which leads to a rapid theme in 7/8 meter. The thematic material is presented in short fragments and is primarily in the right hand, with the left-hand performing an ostinato bass. The next section is in 4/4, but the quarter note in this section is the same speed as the eighth-note in the first section (i.e., half the tempo of the opening). The next section contains a short reference to the opening section, followed by short cadenza-like material. The solo concludes with short quotes from the earlier material.

The solo is tonal and contains many challenges, not only in technical material but also in the interpretation of metric modulation and meter changes. The notation is very clear, and includes number assignments over some footnotes to help with the sticking or mallet choices. This composition is within the level of a solid high school or younger college student.

—George Frock

Meditation **V**
Frank E Warren
$7.50
Frank E. Warren Music Service
"Meditation" is an unusual work for solo marimba (five-octave instrument required). It employs several special techniques that help in expanding the sonic possibilities of the instrument. The work features an ethereal opening that requires independent rolls in the left hand while the right hand bows notes in the upper range. This section is governed by timings (in seconds) rather than traditional metric markings or measures. The middle section takes on a schizophrenic character that features some sections of melody and accompaniment and others with flurries of hand-to-hand sixteenth notes. Often, the accompaniment voice is asked to play staccato notes "damped by mallets, fingers, hips or best possible means." There is also a section that uses thematic material from J. S. Bach's "Invention in F-minor," and includes many of the difficulties of playing Bach Inventions on marimba. The work closes as it began, with the performer using mallets in the left hand and bowing bars in the right. The accomplished marimbist will enjoy the many challenges in "Meditation."



—Scott Herring

Memento for Solo Marimba **VI**
Ivan Trevino
$15.95
HoneyRock
This unaccompanied four-mallet marimba solo, which was the second-place winner in the 2007 PAS Composition Contest, requires a five-octave marimba. Structured into two parts, "Prelusion," and "Memento," the overall style of the composition is rhapsodic—reminiscent in its sectional structure of works by Ney Rosauro and Mark Ford—with tonal references to D-flat Lydian before modulating smoothly to c-sharp minor and a final cadence on E major. The six-minute work is filled with arpeggiated figures and many changes of meter. This composition would be quite appropriate for the college or graduate level marimba soloist.

—Jim Lambert

KEYBOARD PERCUSSION ENSEMBLES

Distinctive Duets **IV**
David Kovins
$24.95
HoneyRock
Published in over-sized full scores, David Kovins' *Distinctive Duets* is a collection of 12 duets for two vibraphonists. Each of the 12 duets has its own unique style—from 1940s jazz to country/pop to a classical waltz. Each duet is subtitled with a Roman numeral, but they could be performed individually or potentially as an arbitrary "suite" of duets for an undergraduate junior or senior recital. Mature four-mallet technique and stylistic maturity are necessities to make these *Distinctive Duets* sparkle.

—Jim Lambert

P. S. **IV**
Shawn Michalek
$12.00
Shawn Michalek
"P. S." is a marimba duo intended for two players on one five-octave marimba and is dedicated to Yuko and Tomoko Yoshikawa. This short work is quite charming, yet not overly challenging for two moderately skilled marimbists. The upper part (treble clef) features cascading pentatonic linear figures that frequently interlock with the lower part. The lower part (bass clef) requires four mallets for its ostinati and rolled chords in the slow section. The work is in ABA form, with the outer sections a lively dance in 7/8, and the inner a more lyrical, song-like setting. "P.S." would make a suitable closing work or encore piece for an undergraduate recital.

—Scott Herring

Reflex — Fanfare Prelude **IV**
Gordon Hughes
$48.95
Rhythmscape Publishing
"Reflex" is a two-minute trio for vibe and two marimbas (one five-octave and one four-octave). Other than a few double verticals for marimba I, the parts are easily playable with two mallets. The composer deliberately uses several specific intervals to generate the main melodic material (P4, P5, 7th, octave, and 2nd/9th). Mostly tonal vertical sonorities seem to be almost coincidentally created by the highly linear and contrapuntal writing. The piece is rhythmically straightforward with some use of changing meters. The bright-yet-tonal sonorities and the unrelenting, almost in-your-face rhythmic development combine to make the trio a good opener or closer for a university junior-level recital or chamber music concert.

—John Baldwin

Celero **VI**
Thierry Deleruyelle
$38.94
Gerard Billaudot Editeur
"Celero" calls for four keyboardists playing fast-paced, non-stop flourishes up and down their instruments. Although written in c-minor, chromaticism permeates every measure in this contemporary work. Two vibes and two marimbas play in unison, pairs, solo trade-offs, and melody/accompaniment patterns. This through-composed work lasts four-and-a-half minutes and relies on syncopated patterns in each part and between voices. A rapid tempo of quarter-note equals 152 increases the energy level of the work as well as the difficulty level with mixed meters, shifting accents and overall technique. The performers' speed, endurance and precise accuracy will be thoroughly tested.

—Brian Zator

SNARE DRUM

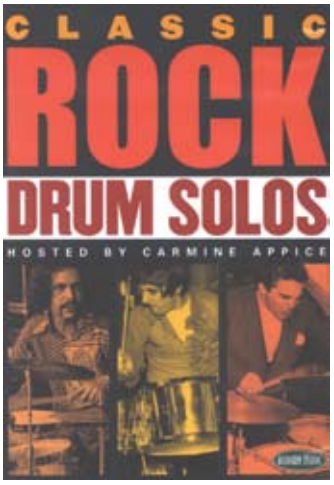
The Whimsical Nature of Small Particle Physics **VI**
Ben Wahlund
$18.00
HoneyRock
Compositions for solo snare drum are usually a compilation of rudiments, some more creative in musical expression than others. This is an extremely creative solo, which is written to be performed with a CD. The CD is a sample of sound colors, which the composer describes as subatomic particle known as "quarks." Scientists refer to these quarks as flavors.

The work is presented as a suite of six flavors of quark. The solo explores these flavors against the rhythmic figures on the snare drum. The tempos are fast, the rhythmic figures are technically challenging, and the coordination of the snare with the CD will take considerable study. The writing is definitely complex, much in the style of Delecluse, but there are many common rudimental influences as well. The notation and sticking patterns are clearly presented. For those who have the opinion that the music for snare drum has been saturated, please give this one a shot.

—George Frock

DRUMSET

Classic Rock Drum Solos
Various Artists
$29.95
Hudson Music
Classic Rock Drum Solos is a two-hour compilation DVD that chronicles the evolution of the "drum feature" in pop music. Host Carmine Appice provides context for archival footage of Gene Krupa coaching actor Sal Mineo for the



title role in *The Gene Krupa Story*, Lionel Hampton, Shadow Wilson (Louie Jordan), Jimmy Vincent (Louie Prima), Mel Taylor ("Wipeout" with the Ventures), Ralph Jones (Bill Haley and the Comets), Ron Bushy (Iron Butterfly), Don Brewer (Grand Funk Railroad), Michael Shrieve (with Santana at the Woodstock Festival), Clive Bunker (Jethro Tull), Carl Palmer (ELP), Ian Paice (Deep Purple), Keith Moon (The Who), Carmine Appice (Leslie West Band), Danny Seraphine (Chicago), Cozy Powell (Whitesnake), Steve Smith (Journey) and Neil Peart (Rush). A brief interview with Sandy Nelson, a 1968 journalist's interview with Ginger Baker, a John Bonham tribute from Carmine Appice, and a radio interview with Keith Moon complete the collection.

Although the DVD is entitled *Classic Rock Drum Solos*, this collection contains footage from the 1940s to 2004. It will interest drummers who want to see how the extended drum solo developed and changed over the last 60 years. Most of the video examples are open-ended drum solos that can conceptually be traced back to Gene Krupa's "Sing, Sing, Sing" solo, and it reinforces the link between jazz and rock drum soloing.

—Terry O'Mahoney

Exploration in Rhythm (vol. 1) **III–V**
Ed Saindon
$16.95
Advance Music
The author states in the introduction of this drumset instructional book, "Many times, an improviser resorts to primarily consecutive eighth notes played from measure to measure without any space. Some improvisers seemed to be 'locked in' by the chord changes and tend to play in one, two, and four measure phrases… The material in this book is meant to expand the rhythmic palette for the improviser and composer."

While the word "hemiola" is not found in the text, the book is essentially an exploration of various hemiola patterns and the resulting polyrhythms, thus expanding the improviser's rhythmic vocabulary. The book is organized into ten chapters, each focusing on a different concept. Some chapter titles include "Phrasing with 8th notes in 3/4," "Phrasing with Triplets in 4/4," "Phrasing with 16th notes in 5/4," and "Phrasing with Polyrhythms." Each chapter is broken down into exercises using the note values in various configurations. For example, in chapter 6, "Phrasing with Triplets in 5/4," there are exercises with triplets phrased in groups of 4, 5, and 7. Each chapter also has exercises in "mixed phrasing," using all the combinations covered in the chapter. There are also exercises that add pitches.

The exercises in this book would be excellent for any improviser to use as vehicles to practice different phrase possibilities. Drumset players will also find many ways to apply this book. The systematic approach will also help students organize their thinking about these rhythms and increase their understanding.

—Tom Morgan

MULTIPLE PERCUSSION

Mineral **IV**
Frederic Jourdan
$14.07
Gerard Billaudot Editeur
"Mineral" is a French-conservatory multiple-percussion solo that is nearly seven minutes long and includes a piano accompaniment. Movement I, "Sables," is scored for four-piece drumset with suspended cymbal. Movement II, "Aiguemarine," focuses on three timpani with parts also for woodblocks and cymbals. Movement III, "Quartz," is for keyboard percussion solo with marimba and vibe recommended.

All performance directions and implement suggestions are written in French and English. The piano part appears to be of a slightly higher difficulty level than the percussion part. The piece would be appropriate for an intermediate-level high school percussionist or a young university percussionist just getting acquainted with the genre of multiple percussion.

—John Baldwin

TIMPANI

Traits d'orchestre pour timbales et piano **IV–V**
Various Composers
$14.99
Gerard Billaudot Editeur
This is a collection of timpani orchestral excerpts adapted for timpani and piano accompaniment. The timpani part is identical to the original excerpt, and the length of the excerpt ranges from four to 20 measures. The piano part contains the same dynamics as the orchestra accompaniment, and the tempos are also similarly indicated. The composers included in this collection are Brahms, Berlioz, Wagner, Tchaikovsky, Beethoven, Liszt, Dvorak, Rimsky-Korsakov and Glinka.

This resource would be most helpful for students researching excerpts with a score in addition to the timpani part. The piano reduction is clearly notated and is easier to read than a full score. This should not be the only resource used when studying these excerpts because much information about the piece is omitted due to the length of the excerpt. However, it could be a helpful tool for timpanists looking for detailed, harmonic information.

—Julia Gaines

Fantaisie romantique pour 5 timbales et piano **VI**
Graciane Finzi
$21.62
Gerard Billaudot Editeur
This timpani solo was written for the 2005 Perkumania Festival and was a required competition piece for the contestants. It is a lengthy work at 10 minutes and 30 seconds and is very advanced. It requires a clear command of smooth tuning, glissandos, rolls between drums, and even fast sixteenth notes around all five drums. The piano accompaniment is complex and requires a good comprehension of polyrhythms.

The piece opens with an aggressive statement by the timpani in cadenza-like fashion followed by a quasi-roll section. The notation of the glissandi within the rolls is very clear, and guide notes are included before each major section. The middle section contains a rhythmic passage with the piano that is unison in rhythm but not pitch. The overall tonality of the piece can be characterized as atonal. There is a polyrhythmic section between the timpani and piano where the timpani plays thirty-second notes while the piano plays quintuplet thirty-seconds underneath the timpani rhythm. The piano eventually progresses to sextuplets, septuplets, sixty-fourth notes and even "10 notes" within a quarter-note at one point.

The final two minutes of music is solid sixteenth notes in the timpani and piano part and is loud and aggressive to the end. This is a great work for a graduate recital and will require an excellent accompanist.

—Julia Gaines

Nessun Popolo Oppresso 10 **VI**
Luigi Morleo
$14.00
Morleo Editore
This is a very challenging solo, written for four timpani. The solo is unique, because it is not written with themes, but instead is constructed over a steady heartbeat of sixteenth notes throughout much of the composition. The piece starts with a duet between the right and left hands, playing unison F's on drums III and IV. The drums move chromatically to contrasting pitches, which creates a dissonance

of sound and color. As other drums are added, the challenges increase as pedal changes are notated for each timpani. Some of the challenges are performing triplet patterns and other rhythmic figures with one hand while playing steady sixteenth notes with the other. In addition, there are notations for playing in various areas of the head, the rim and even on the kettle itself. The rhythmic patterns increase in difficulty as the work develops.

The notation is written on a double staff, which is really helpful in identifying the division between the hands. It is also very clearly presented, with the editor employing Roman numerals to identify the drums to play on, and the use of letters to identify the area for striking the notes. The solo is dedicated to Jonathan Haas, and will be a unique solo for the advanced recital program.

—George Frock

PERCUSSION ENSEMBLES

Lucie **II**
Jean-Claude Gengembre
$21.62
Gerard Billaudot Editeur
This easy percussion quintet is subtitled "Little Lullaby" and lasts about two minutes. The melody in C-major is gentle and sweet, and it will be enjoyable to performers and audiences alike. Instruments needed include glockenspiel, xylophone, two vibraphones (although one is only needed for ad lib in the first eight bars), 4.3-octave marimba, and four timpani. While the melody line is played on the vibraphone, other instruments double the melody for timbre changes and provide counter-melody lines as well. This piece works well for beginners with primarily quarter and eighth-note rhythms with a few triplets and sixteenth-note patterns. In addition to scalar motion, players are required to play arpeggios and double stops.

—Brian Zator

Zylo et tritri **II**
Jean-Claude Gengembre
$12.64
Gerard Billaudot Editeur
"Zylo et tritri" is an easy two-minute trio scored for xylophone, marimba and vibe, with each player also playing triangle. The tempo is 72 bpm, with the beat remaining the same in the contrasting 6/8 section. The xylophone and vibe parts include quarters and eighths, with some double-stops (no pedaling indications for the vibe). The marimba part is the most involved, with many double-stops and a few rolled three-note chords (mostly closed position first inversion triads with two open position root position triads). The middle section of the marimba part is in treble clef with the outer sections written in bass clef. The work would be suitable for a studio recital for young keyboard percussion students who possess basic technical and musical skills.

—John Baldwin

Cystic Mystic **III**
Scott Johnson
$24.95
Upbeat Music Publications
This piece is written for a jazz combo with the drumset, bass and second marimba functioning as the rhythm section while a lead marimba and pan player perform the melody and solo sections. The style is a quick Afro-Cuban 6/8 with a simple melody and easy chord changes. The piece is very typical of a standard jazz chart with a short presentation of the melody followed by a solo section that can be repeated at will. The *D.S.* ending presents the melody one last time. The lead parts could easily be played on any two keyboard percussion instruments or two pans. This would be a good piece for students working on improvisation and could be included on a jazz program as well as a percussion program.

—Julia Gaines

Folk Medley, Bulgarian Traditional Dances **IV**
George Tantchev
$30.00
Tantchev Publishing
This keyboard percussion quartet (with percussion accompaniment) was commissioned by the Polyrhythmia Percussion Ensemble. The piece contains four different sections in odd time signatures (7/8, 11/16, 13/16, 25/16). The two-mallet bass line in the marimba part requires a low-C (five-octave) instrument and is mostly octaves. The vibraphone part is limited to chordal accompaniment and requires four mallets. The top two voices are alternating two-mallet xylophone lines for most of the piece. The percussion part is written for three different pitches and is broadly labeled as hand drums, tupan or drumset.

The piece begins with a moderate tempo of 126 and gets progressively faster by the end. It's a fairly short piece of only 105 bars. The main difficulty in the piece is the odd time signatures; however, the beaming of the beats is very clear and the rhythms are not as difficult to count as it

OUTSTANDING CHAPTER PRESIDENT AWARD

Nominations are now being accepted for the 2008 Outstanding Chapter President Award. The winner of this annual award, now in its eighteenth year, will receive an engraved plaque and a $1,000 grant for his or her chapter.

The Outstanding PAS Chapter President Award recognizes individuals who have increased chapter membership and provided percussion events, newsletters and experiences that are beneficial for the continued music education of chapter members.

Nominations should include supportive information and must be received by June 1.

Self nominations are acceptable.
Send nominations to PAS:
32 E. Washington St., Suite 1400
Indianapolis, IN 46204-3516 or
E-mail: percarts@pas.org

may seem. An ensemble that has a clear understanding of beat subdivision in twos and threes will not have a problem performing this piece. The instrumentation (low-C marimbas) may keep the piece out of the typical high school situation, but any college ensemble will find this piece a good exercise in counting odd meters. It looks like an excellent and exciting opener or closer to a college concert.

—Julia Gaines

Hand Pay **IV**
Scott Johnson
$24.95
Upbeat Music Publications
This piece is written for a jazz combo with a typical rhythm section of drumset, bass and guitar. The lead parts are written for marimba and lead pan and include quick double-stops and some chromaticism. The solo section is 16 bars with simple chord changes in A-major. This calypso composition varies from the typical jazz chart as the form is not that transparent. It has a nice, laid-back melody and tempo, but the sixteenth notes in the pan part could be challenging. It would fit nicely on a Latin/jazz program.

—Julia Gaines

How Odd **IV**
Sherrie Maricle
$21.95
Kendor Music
Sherrie Maricle has written a great new fun work for eight percussion players all playing non-pitched (or at least relatively pitched) drums. The work comes with a clear, legible score with a complete set of parts. The instrumentation includes snare drum, eight toms, four brake drums, four metal pots or bowls, two large garbage cans, crash cymbals and bass drum.

Opening in 4/4 with the quarter note at 120 bpm, the feel might first suggest a military drum break. But soon, measures of 3/4, 7/8 and 5/8 begin to creep into the score, adding a very interesting and "odd" feel.

A middle section involves stick clicks and requires playing on one's neighbor's sticks, adding both a tonal and visual treat. Later in the work, a two-measure vamp gives opportunities for several players to play solos or even duets. The work concludes with patterns and rhythms similar to the opening material and ends with a final flourish. Younger performers will have fun with this new work.

—F. Michael Combs

King Bossa **IV**
Scott Johnson
$24.95
Upbeat Music Publications
This piece for jazz rhythm section (bass, guitar, drumset) and lead players (marimba and pan) is a bossa nova theme and variations. The lead pan player states the melody from the very beginning while the marimba and guitar parts both have "comping" patterns. This appears to be somewhat redundant and thick for this small ensemble. The same chord progression is heard throughout, while the melodic line continues to repeat and embellish in different forms. The solo section is the same progression, and when the melody enters again, there is no distinct ending.

Having the same 16-bar progression throughout the piece with no introduction and no ending makes for a bland palette of music. The virtuosity of the soloists, perhaps, is the only saving element of this work as it includes running sixteenth-note passages in both lead parts at a tempo of 168 bpm.

—Julia Gaines

Rhythmic Nuances **IV**
George Tantchev
$15.00
Tantchev Publishing
This piece is an excellent addition to the concert percussion duo repertoire. The instrumentation is accessible to most school situations, including high school, and requires four timpani, cowbell and maracas for Player 1, and bongos, two congas, claves, guiro, hi-hat, shaker, small crash cymbal and pedal bass drum for Player 2.

The work is divided into three movements; however, it appears they should be played *attaca*. The first movement is short and improvisational with Player 1 on timpani and Player 2 on accessory instruments. The second movement is fast, primarily in common time, and contains a solo section for Player 1 with the handles of the timpani mallets on the heads of the drums. The third movement continually shifts between mixed meters and is the most difficult of the three. Player 1 begins with a maraca ostinato while Player 2 takes a solo on bongos played with hands. Toward the end of the composition, the timpani and bongos/congas have a fast and difficult, unison 5/8 passage at *pianissimo* that is repeated. The tempo is fast overall and ends with an aggressive accelerando and crescendo.

The three movements contain a total of 170 measures. This piece would work well on an undergraduate recital but is also accessible to two hard-working high school students.

—Julia Gaines

Camaraderie **V**
Daniel Adams
$30.00
Daniel Adams
This ten-minute timpani solo with percussion septet was written as a tribute to the late Dr. John Raush (retired percussion professor of Louisiana State University). The solo part (for four timpani) utilizes three sets of tunings ranging from low E to high A. Standard keyboard percussion instruments are used, along with mostly-standard percussion instruments (the five bowl gongs might be the exception) along with party horns in three parts. Although each part includes several instruments, adequate time for instrument and implement changes is included.

A variety of tempos are used, with changes being controlled by metric modulations. Changing meters and polyrhythms are utilized throughout this work. Compositional and performance devices used include basic rhythmic accompaniment, "call and response" and "trading riffs," improvisation, an extended timpani cadenza, a chorale-like solo section played with yarn mallets, and use of various playing spots on the timpani heads. All-in-all, "Camaraderie" is a musical and exciting addition to the repertoire for solo timpani with percussion accompaniment.

—John Baldwin

L'ami Solitaire **VI**
Jean-Claude Gengembre
$11.75
Gerard Billaudot Editeur
This is a three-movement composition for two percussion players—one a multiple percussionist and the other employing six timpani. The composer permits the use of a bass drum for the lowest notes if six timpani are not available. Notation for the timpani includes performing in the normal beating spots, playing on the counterhoop, the bowl, and on different areas of the head. The multiple percussion score includes bass drum, four tom-toms, a pair of bongos, five temple blocks, muted snare drum, and a three-octave vibraphone. The three movements create the normal large three-part form of ABA, fast, slow, fast.

Both parts require advanced players, as there are numerous meter changes, technical passages and rhythmic modulations. There are many unison passages, as well as counter-rhythms between the two players. The notation is clearly marked so that instrument changes are identified. The work should take about 12 minutes to perform, and should be a nice addition for the advanced recital program.

—George Frock

Percuria VI
Didier Benetti
$18.12
Gerard Billaudot Editeur
This is a challenging duo for two percussionists that enables each player to express his or her virtuosity. The composition, which takes approximately 15 minutes to perform, is written in three contrasting movements with each player carrying an equal role of musical expression. Player I performs on a low-F marimba and a sizzle cymbal. The second player performs on a pedal bass drum, four toms, vibes, crotale, tambourine and tam-tam.

The first movement is a quick tempo with the meter shifting between 6/8, 8/8 and 7/8. The parts have many unison events as well as patterns that intertwine. The second movement is slow, with many whole and half-note rolls. The movement concludes with the roll speed slowing down to sixteenth notes, which sets the tempo for the final movement. The movement features syncopated patterns that are repetitive. The print and editing is very clear, with the various instrument choices and mallet requirements being very specific. This should be an excellent addition for an advanced recital or chamber music program.

—George Frock

MIXED INSTRUMENTATION

Cinq danses dogoriennes **VI**
Étienne Perruchon
$36.39
Gerard Billaudot Editeur
This duet for cello and percussion (five timpani and three temple blocks) comes with two full scores, although the page turns for both the percussionist and the cellist are a problem. The piece is actually a set of five dances and is about ten minutes in combined total length. The first dance, about two minutes long, moves between 3/4 and 6/4 with the quarter note remaining steady at 116 beats per minute. The second dance is in a brighter tempo staying predominately in 5/4 with a few 3/4 measures. The third dance stays in 4/4 but with the quarter note at 80 beats per minute. The fourth dance is in a gentle waltz, and the final dance is in a driving 4/4 with the quarter note remaining at a steady 112 bpm.

The timpani part is very challenging—not only rhythmically but also in terms of pitch requirements, since the timpani line coordinates harmonically with the cello part. Special effects such as playing on the bowls, playing on the rim, and mallet recommendations are indicated in the timpani part. The three temple blocks are interwoven into the mixture in a most effective way.

With the exception of only a few measures, the cello and timpani/temple blocks play together throughout, so the work is a true duet with each part being of equal significance. This is one of the more interesting attempts to combine such instrumentation, and the end result should be well worth the effort.

—F. Michael Combs

PERCUSSION RECORDINGS

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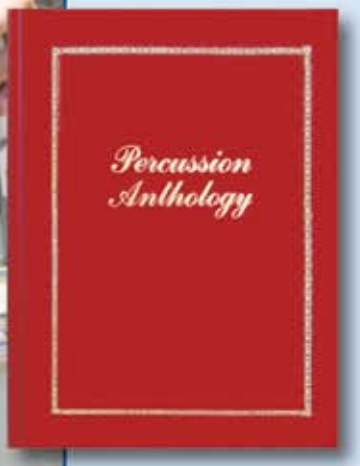

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and it's a musically exciting collection of 14 modern jazz tunes (12 originals and two standards) performed by a cohesive and dynamic ensemble. Many of the tunes are stylistically similar—"broken" straight eighth-note grooves with dark harmonies—and fall into the medium tempo range. There are also several solo piano features by Saindon, and his rhapsodic piano style is often reminiscent of Keith Jarrett's solo work. His piano style nicely contrasts with his vibe/marimba playing, which has a modern harmonic and rhythmic approach.

In addition to Saindon, the recording features the considerable talents of former Miles Davis sideman Dave Liebman (soprano sax/Indian flute), David Clark (bass) and Mark Walker (drums). Saindon sounds great on piano as well as mallets and Walker contributes great energy and a strong groove.

The recording opens with a great deal of energy featuring the entire ensemble ("The Last Goodbye," a snaky, fluid version of "Green Dolphin Street," and a slinky bossa nova entitled "Giorgio's Theme"), but winds down toward the end with several mellow piano ballads. In addition to the his performance on the recording, a tribute to the great Argentinean tango master Astor Piazzolla ("Piazzolla") and the waltz "Alpine Sunrise" are beautiful tunes that highlight Saindon's strong compositional abilities.

—Terry O'Mahoney

Go Between
New Percussion Group of Amsterdam
Summerfold Records

Go Between is a re-release of an album by the same title from 1986; however, it has not been available for some years. The disc is a collaboration between the New Percussion Group of Amsterdam (Rudd Wiener, Peter Prommel, Herman Rieken, Steef van Oosterhout, Johan Faber, Toon Oomen, and Jan Pustjens) and drumset artist Bill Bruford and marimbist Keiko Abe.

The title track, "Go Between" by Weiner, features Bruford on drumset accompanied by keyboard percussion in a work that evokes moods from hard rock to Pat Metheny to minimalism. The unison figures between the drums and keyboards are incredibly tight, and Bruford's solo work is quite tasty. "Redbone" by Niels Le Large is for five percussionists playing log drums and peacock gongs. The work is well-performed by the group, but the effect of seven minutes of log drums with occasional gong interspersions is less than awe-inspiring.

Abe's performance of Minoru Miki's "Marimba Spiritual" is fabulous, as expected. This rendition is full of the energy and vitality we have come to expect from her performances, and the ensemble does a fine job with the accompaniment parts. The final track, "Maenaden" by Peter Prommel, is largely a marimba quartet, although the accompanimental percussion parts become more and more prominent as the work progresses (especially the drumset). The work has a decidedly Asian harmonic influence and once again is aptly performed by the group. The percussion community is fortunate to have this recording once again widely available.

—Scott Herring

Live from Lexington
The University of Kentucky Percussion Ensemble
UK School of Music

This CD includes live performances by the University of Kentucky Percussion Ensemble, directed by Professor James Campbell, from 2006 and 2007. The works on this disc represent a variety of compositional styles from the classic works "Double Music" (John Cage/Lou Harrison), "Ketiak" (Akira Nishimura) and "Bonham" (Christopher Rouse) to the more recent works "Sprint" (Rob Smith), "Terra-cotta Warriors" (Campbell) and "Whispers" (David Skidmore).

The recording quality is remarkable considering they are live performances. The intricate details in "Double Music" and "Terra-cotta Warriors" are crystal clear, yet the visceral energy of "Whispers" and "Bonham" are not lost. The performance level of all the works is first rate, yet the disc retains the raw energy of live performances. Other works on the recording include "Kalabash" (Nigel Westlake), "Purdy's Maze" (Brian Nozny) and "Drums of Winter" (John Luther Adams). This project is certainly an artifact that the students from the University of Kentucky should be proud of, and it is an important reference recording for those interested in performing these works.

—Scott Herring

The Music of Eun Hye Park
The McCormick Percussion Ensemble
Capstone Records

The CD is a compilation of Eun Hye Park's compositions for percussion. Titles include "Recollection" for eight percussionists, "Disturbance" for violin and percussion, "Imago Dei" for cello and percussion, "Ephphata" for marimba quartet, "Cheo Yong" for dance and four percussion, and "Yom Kippur," parts I and II, for voice (narrator) and percussion. Park's style is very contemporary, and many of

the idioms and motives are influenced by Biblical passages. It is obvious that Park is adept in percussion writing and textures, as well as techniques.

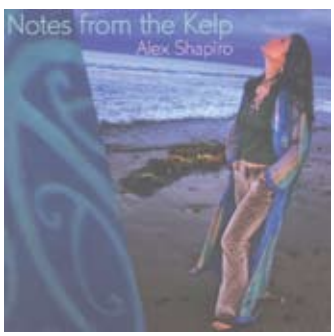
The performances by the soloists and the percussion ensemble are of the highest quality. This CD will be an excellent source for good listening, but also for composition students to learn how percussion can be used to accompany different instruments and voices.

—George Frock

Notes from the Kelp
Alex Shapiro
Innova Recordings

This is not a "percussion" recording, but it is full of wonderful compositions, several of which make prominent use of percussion. This eclectic group of pieces by Alex Shapiro run the gambit from joyful, almost giddy moods to dark, somber colors that remind one of Bartok or possibly Berg. The first piece to use percussion is "Slipping," which is written for violin, harpsichord and percussion. This is a musical romp through many different styles, all of which are foreign to the harpsichord. We hear a crazy mixture of tango, Middle-Eastern, Cuban, and many other styles, skillfully melded together in a mosaic that also features Dan Morris performing on hand drums.

The major work with percussion is a three-movement piece titled "At the Abyss." This musical reaction to the many sad and violent events occurring throughout the world is scored for piano, with Thomas Burritt playing marimba and vibraphone and Peggy Benkeser playing percussion. The second movement in particular is striking. The mood is very compelling, and Shapiro skillfully uses keyboard percussion intertwined



with the piano and bowed crotales and cymbals throughout. The third movement is a workout for the marimba and vibes as they take the lead much of the time. This very intense movement is based on a recurring complex melodic figure that is relentless. It finally builds to an exciting climax. This piece will be an excellent addition to any percussion concert.

A percussion honorable mention has to be given to "Bioplasm," written for flute quartet. Here the flutes are used as percussion instruments, creating a "throbbing pulse of life" with their keys and air stream. Later the players are called upon to sing, sometimes with what sounds like a multiphonic effect.

This inspiring recording is great to listen to regardless if one is a percussionist or not. But *At the Abyss* should be considered by any percussionists looking for great literature to perform.

—Tom Morgan

Percussion Beyond the Timelines
Georg Edlinger
Extraplatte

If you're ready to listen to some very cool and traditional drum music from the Orient, Senegal, Cuba, Congo, Mali, and Ghana—and wrap those with some original percussion solos and duets—then you have *Percussion Beyond the Timelines*. All works are played by Georg Edlinger, with the exception of two of the pieces that involve guest players from Senegal. All of the pieces were arranged by Edlinger, and seven of them are his original compositions.

This CD is more like a drum circle for one, except it is one large step beyond. Liner notes suggest playing along with these tracks, of which there are 14. All pieces are relatively short, with the longest being around six minutes and the shortest around two. The basis for each of the 14 pieces is the clave rhythm that the performer refers to as "timelines."

The instruments used on this recording are varied and include instruments such as *dumbe*, *sangban*, *surdo*, *udu*, *djemben* and *batas*. Also, more traditional percussion instruments are used that include congas, shakers, claves, windchimes, floor toms, timbales, bongos, cymbals and bell. There is just the right amount of electronic sound mixed with a few of the tracks. The overall sounds are intriguing, the sprit of the music is exciting, and the quality of

the recording is excellent, so it is easy to hear all voices clearly. This CD provides an excellent opportunity to experience genuine ethnic music and exciting creative endeavors by an accomplished performer.

—F. Michael Combs

VIDEO

Percussive Palooza
University of North Texas Wind Symphony, Eugene Corporon, conductor
$24.95
GIA Publications

This one-hour, 41-minute DVD from the performance of the University of North Texas Wind Symphony filmed at PASIC 2006 in Austin, Texas features nine significant percussion compositions by nine contemporary composers. The word "lollapalooza" is defined as "something outstanding of its kind." This "percussive-paloosa" is an incredibly outstanding DVD of stunning performers and performances under the masterful baton of Eugene Migliaro Corporon. Among the percussion soloists featured are Keiko Abe, Mark Ford, Christopher Deane, Paul Rennick, Robert Schietroma and Brian Zator. This DVD also includes very rare footage of Japanese marimba soloist Keiko Abe, and includes a bonus feature of 80 minutes of panel discussion by composers Russell Peck, William Kraft, Bruce Yurko and Abe.

Among the compositions included are: "Lollapalooza" by John Adams; "Cadenza and Variations from Concerto for Four Percussion Soloists" by William Kraft; "Monovalence la for Marimba Improvisation and Tape" by Ikebe; "Airscope II for Marimba Improvisation and Tape" by Matsushita; "Ode to Whales for Marimba Improvisation and Tape" by Hauta-aho; "Concerto for Nine Percussion Soloists" by Bruce Yurko; "Prism Rhapsody II" by Abe; and "The Glory and the Grandeur" by Peck. This is a definitive, first-rate DVD which will serve as a percussion pedagogical and reference tool for generations to come.

—Jim Lambert

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— Otice C. Sircy, PAS Museum Curator and Librarian, and James A. Strain, PAS Historian

Close-up view of the cardboard resonators, showing the capped ends and mounting box.

Close-up of motor for the rotating fans. Note the simple "on/off" toggle switch and one-speed pulley.

Deagan Model 30 Vibraharp, 2 1/2-octave range, with lightweight frame on wheels. Note the handle used to carry the instrument.

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