

Percussion for Composers: An Introduction

- I) Instruments found in Western Music
- Pitched: Marimba, Vibraphone, Xylophone, Bells, Chimes, Crotales, Timpani, Steel Drum*, Almglocken*, and Tuned Gongs* Like most other instruments, these sound the most characteristically and will project and articulate their best in their mid ranges. (* Not as commonly available)
 - Unpitched: (all come in a variety of graduated sizes) snare drum, bass drum, crash or suspended cymbals, tambourine, triangle, tam-tam, concert toms, temple blocks, castanets, cowbells, bongos, congas, other Latin percussion, flower pots, trash cans, brake drums, kitchen sink, etc.
 - grouping instruments into 'choirs' of wood, metal, and membrane is an effective use of organizing sounds (see Janissary Music/Wuorinen, Marimba Spiritual/Miki or Psappha/Xenakis)
 - dynamic range of each instrument can vary greatly. i.e. ff on timpani or toms will likely obscure almost any amount of keyboard percussion at the same level
- II) Notation and Intent
- Consistency and Clarity in notation are most important. When writing for more than one pitched instrument, label each entrance of the new instrument. For non-pitched, clearly establish notational territory for each instrument (i.e. snare drum and triangle should be in different parts of the staff). The more instruments written for, the more likely that altered note heads might need to be employed. (Cymbals and other metallic instruments are sometimes notated with an 'x' notehead). Because 'wrong notes' in a non-pitched setting will not seem as intrusive, misleading notation can often go unchecked by the player and/or director during the first read, thus increasing the chances that the same mistake will be repeated.
 - When switching between pitched and non-pitched instruments, don't forget to change clefs.
 - mimicking pitched notation by placing lower sounding instruments (i.e. bass drum) towards the bottom, and vice versa, will help performers see direction and intent
 - rolls/sustain should be notated with slashed stems or tremolo markings. Otherwise, notes will be struck and allowed to decay naturally
 - For larger multi-percussion set-ups, although writing each instrument out on its own staff will make it easier during the writing process, it seldom ends up being the best notation for the performer. This is because it will obscure any kind of composite line created between the instruments, and in general it's always more difficult to read off of more staves than less.
- III) Implements and Articulation
- felt, yarn, wood, aluminum, brass, rubber, plastic, and cord mallets, as well as bows, sticks, rattan, hands, brushes, and wooden dowels (rute) can all be used. The only limitation is that the implement cannot be harder than the material that the instrument is made of, otherwise it will damage the instrument (i.e. brass on a vibraphone). If the hardness is too little (soft mallet on wood block), the ictus will begin to obscure and/or the instrument will not speak.
 - having all instruments played with the same implement is one way to control and manipulate texture, articulation, and balance.
 - rapid and drastic dynamic changes and accent patterns are easier for percussionists than most other instruments.
 - the longer that a single instrument naturally sustains, the more control the composer has over when it can/should end
 - 'dead strokes' or completely stopping the mallet on the bar on mar/vibes/xylo will immediately shorten the sound, but it will also bring down the playable speed limit
 - playing zones/spots (rims, shell, center or bowl of a timpano, nodes, resonators, end boards, etc.) can extend the sounds possible out of one instrument

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- up to four types of implements (ex. Triangle beater, snare stick, xylo mallet, and timpani mallet) can be held at a given time. The more variety in hand, though, the less versatility/speed the player will have using any one given implement. (Think about a Swiss Army knife; it has many tools but the compromise is that the quality of each individual tool is diminished for the convenience of easy access)
- The lower the sound, the softer the default implement will be and vice versa. Notate otherwise if this is not desired, keeping in mind the limitations in the first item in this section.

IV) Limitations

- in general, the more instruments we have to play in a given amount of time, the less options and/or control we will have over sound production/quality (imagine cooking an entire Thanksgiving dinner for 10 all by yourself. It would be very hard to get everything just right)
- although a select few pieces have up to six voices at a time on a solo keyboard part, because of the geography of the percussion keyboard and the arrangement of human anatomy, the standard is no more than 4 pitches at once.
- changing instruments or implements takes time (i.e. triangle to tambourine to crash cymbals)
- when writing for 4 mallets, a four note chord shouldn't have more than 3.5 - 4 octaves between outer voices, and 9ths between bass and tenor or alto and soprano voices
- Both closed voiced 4 note chords the span less than an octave and feature accidentals only on the inner two voices, and open voiced chords that span more than 2.5 octaves and feature accidentals only on the outer voices are extremely awkward.
- know the standard range of each keyboard as well as a set of timpani.

V) Things that percussionists tend to ignore or dislike or change on their own (This section was written at the request of the professor of an 'instrumentation' class for composers)

- executing over specified and diverse articulations in a short time period when changing implements is not possible (i.e. slurs, tenuto, and staccato on a woodblock) will likely be ignored or 'guesstimated'.
- changing 3-4 pitches on timpani within a measure is fairly difficult even for accomplished players. We only have 2 feet.
- a single struck note cannot crescendo, but has a natural taper.
- for the first read, we do not like excessive ledger lines (don't notate glock, crotales, xylo at sounding pitch.) Instead use a grand staff or 8va indications.
- pieces that feature and subsist only on novelty techniques or require vast 'multi' setups that take 45 minutes to set up, only to use each sound twice (i.e. pieces like Spirals and Interpolations by Gilbert) are not very popular with percussionists.
- repetitive ostinati (i.e. Bolero/Ravel) should include cues

VI) Recommended Repertoire for Study/Listening

Marimba- Reflections on the Nature of Water/Druckman, Yellow After The Rain*/Peters, Velocities/Schwantner, Rhythmic Caprice/Stevens, Two Mexican Dances/Stout

Vibraphone- Mourning Dove Sonnet/Deane, Midnight Star/Friedman, Interzones/Hamilton

Xylophone- ragtime music of G.H. Green

Multi Percussion Solo- English Suite*/Kraft, Rebonds/Xenakis, Generally Spoken.../Zivkovic

Snare Drum- Mudra/Becker, Portraits in Rhythm*/Cirone, 12 Etudes/Delecluse, All American Drummer/Wilcoxin

Percussion Ensemble- Third Construction/Cage, Toccata*/Chavez, The Whole Toy Laid Down/Hollinden, Crown of Thorns/Maslanka, Ionisation/Varese

Orchestra/Band- Heroes Lost and Fallen/Gillingham, Rocky Point Holiday/Nelson, Capriccio Espagnol and Scherezade/Rimsky-Korsakov, Concerto for Orchestra/Tower

*indicates basic and/or simpler instrumental use