Texture, Space, Survival: The Beauty and Challenge of Steve Reich's *Drumming*

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As a performing musician, I am always looking for experiences of "communitas" – a term that denotes experiencing a state of "collective joy", or "a group's pleasure in sharing common experiences with one's fellows" (E. Turner 2012, p. 2-4). It also denotes being "in flow" or in a liminal state, and the "(temporary) resetting of structural relationships that therefore implies a greater sense of equality/equity and connection amongst a group" (e.g. between performer and audience participation in musicking). (Drake 2019, p. 42; see also V. Turner 2008) In other words, it is the experience that one might get during an especially magical performance, where there seems to be a collective energy in the room and everyone appears deeply moved and at least temporarily changed by their participation. Steve Reich's *Drumming* is a piece that has produced this experience for me multiple times over the years.

In 1987, Reich wrote a paper to be given at a composers' conference in New Hampshire on the topics of "Texture – Space – Survival". (Reich 2002, p. 139-144) The topic was assigned to him, and he covered the three aspects in a brief, matter-of-fact way, without a lot of connective tissue: he wrote of his preference for contrapuntal and light textures; touched on aspects of physical, ritual and electronic space; and surveyed his musical training and career path, and provided suggestions to aspiring composers. In all, the essay is practical and largely unremarkable (especially compared to the manifesto-like statement of his "Music as a gradual process") – on the surface, it doesn't give any insight into Reich's work that can't be found elsewhere. However, it seemed to me that those three concepts – texture, space and survival – were precisely the things that made *Drumming* such a mesmerizing and challenging piece for me (and for many others), and that contributed to that feeling of communitas during performances.

TEXTURE

My first exposure to *Drumming* was in the middle of my undergraduate degree at the University of Toronto, studying with Russell Hartenberger. NEXUS had been invited to perform *Drumming* at the 2002 Percussive Arts Society International Convention and had selected student percussionists to play some of the parts. I was honoured to be included, even if I wasn't entirely sure what I was getting into. In addition to learning the parts required for PASIC, Russell wanted the percussion studio to perform the entire piece at the university, so intense regular rehearsals began early that fall semester. Immediately I was aware that this process was going to be much different from anything else I had done musically until that point: for one thing, there was no sheet music to be seen, and Russell explained he was going to teach us by rote. We jumped in immediately and began learning bongo patterns and the process of phasing.

Hearing the bongo patterns and the way they interlocked (especially once a phase had happened, or with the resultant patterns) was a whole new sound for me at that point in my musical development. I hadn't yet had the opportunity to take the Ghanaian drumming and dance course that the university offered, so I didn't recognize similarities between *Drumming* and West African drum music then, though they became clearer later.[1] I had also never heard or seen bongos played that way - the use of timbale sticks made the sound tight and sharp, yet it also had a certain buoyancy. (In "Texture – Space – Survival", Reich states that he generally prefers a "light" rather than a "heavy" texture in his compositions [2002, 140-141].) This combination of attack and pattern overlapping resulted in a pointillistic percussive texture, an aural equivalent to the technique of painter Georges Seurat: a million tiny dots that combined to result in a blanket of colour (or in this case, sound).

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[1] While it is beyond the scope of this paper to fully examine the controversy around Reich's incorporation of non-Western musical materials and cultural appropriation, Reich has acknowledged using West African patterns as musical building blocks (2002, p. 149-150), and has frequently talked about the influence that both West African and Balinese musical materials have had on his ideas of rhythmic structure (e.g. 2002, p. 67, 71, 148). He has also suggesting that such study "confirmed" concepts he was already exploring (e.g. 2002, p. 67, 149).

This, to me, is the delight of Reich's textures in *Drumming*: the aural conversion of these short, individual attacks into and out of something that began to resemble a sustained sound. The transformation is total: the piece begins with one note of the pattern cycle repeated, then notes are substituted for rests in a rhythmic buildup. The pattern thus established, phasing occurs, and resultant patterns are emphasized; eventually the sound grows ever denser, with multiple notes now being played on every possible eighth note within a given measure. In a resonant space, one begins hearing these not as individual attacks but as an always-slightly shifting drone. (The psychoacoustic effect is not unlike how we perceive a snare drum roll to be a sustained sound.) There is a blurring of the "horizontal" and "vertical" aspects of musical attack and line – one becomes the other becomes the first again.[2] This texture can create a sort of meditative or "trance" effect.[3] The slow crossfade between timbres of one self-similar group of instruments to another that marks the transition between movements only heightens the sense of sustained sounds.

The transformation of individual attacks to sustained sounds is even more noticeable on the marimbas in the second movement. In 2002, our initial rehearsals took place in the main percussion studio at the University of Toronto, which is acoustically dry. When we played the marimba section in the more resonant recital hall for the first time, I can still vividly recall my wonderment at how the sound changed: there seemed to be sustained chords, floating in the air just above my head, that consisted of pitches that I knew no one was playing. (Reich had a similar experience when composing this movement which informed his decision to include singers in *Drumming*. [Vogel Weiss 2007, p. 22]) Aural hallucinations may occur in the third movement as well: while playing the glockenspiel section, performers may hear "difference tones" (Hartenberger 2016, p. 91-92), which

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[2] Other composers have since used a similar shift between "horizontal" and "vertical" sense of line as a structural device, including American composer John Luther Adams in movements of *Strange and Sacred Noise* and *The Mathematics of Resonant Bodies* (Drake 2019, 74-75); Michael Gordon's *XY* has similar aspects, though focuses more on polyrhythms has less open space.

[3] It's perhaps no wonder that Prendergast (2003) identifies Reich as an influence on ambient composer Brian Eno and on ambient house music more broadly.

sound as a series of buzzing notes, acoustic artifacts created as a result of clashing high frequencies. (These can become quite distracting and make it difficult to ascertain whether one is in fact striking the correct bars at the correct time.)

SPACE

"Space" as a musical term can signify many different aspects of performance. I will touch here upon aspects of physical and ritual space (which I suggest are closely related, and can contribute to communitas) and the more practical issue of time space (i.e. the space between musical attacks, also sometimes known as a "time feel").

In his essay, Reich suggests that "'space' is a practical factor in performance, but seems peripheral to composition" (2002, p. 141), noting that antiphonal works don't automatically lose their appeal when heard on a mono stereo system. While this may be true, I believe that the physical arrangement of players in a performance area does indeed influence how the audience receives a live performance, especially for instruments as visual as percussion. There is an inherent choreography involved in the striking motions used to play drums and mallet instruments, and just like motions in dance, how this choreography is perceived is dependent on your viewing point. Reich implicitly recognizes this with the suggested setup for *Drumming* (three marimbas end-to-end stage right, four pairs of bongos end-to-end stage centre, three glockenspiels end-to-end stage left, all instruments perpendicular to the front of the stage; the singers, whistler and piccolo player are upstage of the bongos). Not only does this arrangement allow all players on a given set of instruments to be able to hear each other and maintain eye contact, it also deviates from the more conventional chamber setup, and allows the audience full view of all the sticks striking the instruments. The visual effect of many arms playing many notes in succession – especially during the phasing segments – can be just as mesmerizing as the aural effect.

Ritual space is something that I believe is closely related to physical space, as it can shape how we move through/experience the physical space. "Ritual" is a broad term; many associate it with specific religious practices, but, drawing on writings from Christopher Small, Ann Baranowski and others, I consider that ritual is predicated on the purposeful repetition of gestures or events in time, and that all performance has an element of ritual (and vice versa).(Drake 2019, p. 32-24) A performance of *Drumming* exudes a sense of ritual, owing to the use of literal and gestural repetition, the trance-like atmosphere that Reich's textures create, and the effort required on behalf of many of the performers (more on that below). As performers, we have the choice to lean into these elements of the music, and I believe that acknowledgement and enhancement of them through both stage set up and purposeful physical gesture can create a more effective performance. In *Drumming,* Reich didn't want any specific or purposeful emphasizing of any movements or gestures (though he did specify specific performance lighting for a number of years), but it nonetheless became an important part of performance practice:

> […] this essential but unplanned choreography [the gradual movement of musicians from one position to another] added a visual element that emphasized the gradual process of the performance of *Drumming* and the slow unfolding of the compositional process. The movement of the musicians, which appeared Zen-like and almost ceremonial, was certainly not intentional but felt natural and necessary for the mood of the music. (Hartenberger 2016, p. 20-21)

In my experience, this is an essential component of a *Drumming* performance: maintaining a "Zen-like" attitude (both when one is and is *not* playing) helps to maintain the feeling of being inside a special, unusual aural event. (It might not be noticed until its absence – it only takes one performer fidgeting in their seat to pull focus away from the music.)

The selection of physical space for performance also helps enhance the feeling of ritual and can play an important role in the effectiveness of a performance. Though percussionists might usually prefer drier sounding venues, I would suggest that resonant, "sacred" spaces (e.g. churches, synagogues and temples) are ideal, both to help promote the psychoacoustic effects of the music and, through their external associations, to give the performance a sense of mystery that might not

be found in a typical concert or recital hall. *Drumming* works in these spaces precisely because of his instrumentation and texture choices – most instruments are in a frequency range that doesn't sound "muddy" in a resonant space, and the attacks produced with wooden sticks, rubber marimba mallets and wooden glockenspiel mallets are relatively quick and bright and thus retain their clarity.

The other sense of space that is significant in Reich's compositions is the space "between the notes"; or, rather, placement of the notes within space. While playing a steady of stream of constant eighth notes and rests in combination with others seems like it should be straightforward, it turns out that it's often not. (I am reminded of this every time I play Reich's music with anyone outside of the members of TorQ Percussion Quartet, with whom I've played hundreds of performances: the ease of rhythmic interlocking that I take for granted will suddenly seem like a struggle with different musicians). Negotiating exactly how and where to place a note within a time space is perhaps one of the hardest things about Reich's music: everyone must be in exact agreement, as the "margin of error" for placement can be almost infinitesimal. Yet despite needing unity of time feel within an ensemble, the paradox is that one can't be *too* "correct" or metronomic: Reich notes that "The feeling of […] time sense is getting it 'right' which might show up on as oscilloscope as 'slightly wrong'," (2016, p. 174-175), giving credence to musicologist Charles Keil's assertion that "The power of music lies in its participatory discrepancies […] Music, to be personally involving and socially valuable, must be 'out of tune' and 'out of time'." (2005, 96) Reich was strongly influenced by modern jazz in his formative years, particularly the work saxophonist John Coltrane and drummer Kenny Clarke, and both Hartenberger (Tones 2007, p. 27) and Reich (2016, p. 174-175) speak of the importance of a sense of lilt or swing when performing. All of this might seem like a tall order to develop in an ensemble, and it is. In my experience, the only way to ensure a performance with a unified time feel is to spend many, many hours rehearsing; no wonder, then, that Reich held almost a year's worth of weekly rehearsals on *Drumming* before the first performance (Hartenberger 2016, p. 9-15).

SURVIVAL

A performance of a Reich percussion composition makes unique demands upon percussionists: they are called to use some combination of skills that draws both from traditional Western art music performance practice (striking technique and grip, touch, some written notation) and non-Western practices, particularly West African drumming (learning by rote, time feel adjustment, aural cueing, overlapping rhythmic cycles), to say nothing of learning how to phase against another musician. These latter demands are often especially difficult for contemporary percussion students whose main training is in a conservatory setting. There is also a certain type of virtuosity required: not flashy virtuosity, like might be required for a contemporary marimba or multi-percussion solo, but rather a sense of physical and mental calmness and focus that produces extremely consistent repeated motions over long stretches of time (in other words, the ability to participate in a musical ritual). Steve Schick (2006, p. 81) eloquently describes the pleasures and challenges of being "lost" in a piece, and *Drumming* is an easy piece to get lost in (for better or worse). So: how can one "survive" (or hopefully thrive) in a performance? Certainly, having an excellent teacher who has extensive experience performing Reich's music helps, but what are some other keys to success?

The first one is the most important: practice, and lots of it. Performances of Reich's compositions are most successful when everyone on stage knows the music inside and out (this is especially true for *Drumming*, which must be learned mostly by rote and memorized for performance). Listening, while always important for performers, is especially crucial in this piece: being able to recognize how things are supposed to sound, especially during phases or section shifts, is a minimum requirement, as you can't correct a mistake you can't hear. One of composer Pauline Oliveros' "deep listening" practices should serve performers well here: "Listen to everything until it all belongs together and you are part of it." (2010, p. 7) Additionally, extensive rehearsal will engender two important things: an absolute trust in your colleagues that they know the work as well as you do, and the ability to feel the music in your body. The trust element is essential: doesn't leave

any time for second guessing yourself or others, and trying to read from a score of *Drumming* in performance is impractical, if not impossible. To that end, being able to "feel" the music rather will be immensely helpful: the more you play *Drumming*, the more your body and ears will instinctively know whether it is "right" or not, and the more you'll be able to expand your overall awareness away from small musical details and towards the piece as a whole (and become more comfortable with using body language to communicate within the ensemble). Reich notes that the most magic performances happen "in music in general when you know something so well that you're not reading it, you're playing it after a long period of time and it's sunk into you." (2016, p. 174)

This expanded awareness also requires a different way of thinking about rhythm. In *Drumming*, the main pattern of twelve eighth notes or rests is cyclical, and phasing causes it to "rotate" through a cycle. To that end, it's not always useful to think of a fixed downbeat, for what is "beat 1" for one player might coincide with "beat 3" for another, and "beat 5" for someone else. Rather, imagine each player's pattern as going around a clock face, with some patterns occasionally going faster and then settling back into the same speed but at a different place. (Even without phasing, there is a shift in the placement of "beat 1" written into the score between the middle break down and subsequent build up in Part 1 of *Drumming* that requires a sort of mental reset: suddenly "4 o'clock" becomes "12 o'clock".) In addition to memorizing your own part, you must know all the other parts and understand how they all relate. This requires a special sort of split focus: part of your consciousness focuses on the details of your part (placement, notes, dynamics), while the other part is taking a "birds-eye" view of everything else that's occuring.[4] This is especially crucial in the phasing sections: whether you are phasing or playing a "steady" part against a phase, you need to be focusing on both parts at the same time and constantly aware of the relationship between the two. This way of thinking about rhythmic cycles has more in common with West

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[4] Though the necessity of focusing both on small details of a performer's own part and the overall arc of a piece certainly isn't unique to *Drumming*, what is notable is the extra concentration required to resist the pull of others' "beat 1" while maintaining the integrity of your own.

African rhythmic concepts than most Western classical music, which might be expected given Reich's early interest in A. M. Jones' *Studies in African Music*. To that end, some experience playing or studying Ghanaian drumming can be extremely helpful when tackling *Drumming*.

Lauded though it may be, *Drumming* isn't for everyone, whether performer or audience. Hartenberger recounts Reich auditioning percussionists by asking them to try phasing, and admits that "some people understand the music and the technique, and some just do not" (Hartenberger 2016, p. 16). *Drumming* requires a steep learning curve to become comfortable with phasing, a time commitment to ensemble rehearsal that is greater than many other comparable contemporary pieces, and an immense amount of focus and concentration in performance, all to play what is essentially variations of the same rhythmic figure for an hour. Nevertheless, if the sound world of it *does* appeal to you, then I can whole-heartedly recommend its study, as being part of a successful performance of *Drumming* with a group of committed colleagues and an engaged audience is an extremely powerful sensation. My feeling of excitement and anticipation when stepping onstage to perform this piece, especially for an audience that may not have heard it before, is perfectly summed up by Pauline Oliveros in the first part of her composition "Sounding Secret Spaces":

> When I am creating a piece on stage, the spaces are secret. The secrets are in everybody including me, until they are sounded. And when they're sounded, the secrets are out. The audience is an instrument too. If I am pure about my listening and creating the sounds that come forth, the audience will feel that and respond to the sound. (2010, p. 264)

I am grateful to have had the opportunity to learn and perform *Drumming* and other Reich works over the last two decades, and to sometimes experience the feeling of communitas that those performances may bring. I look forward to continued opportunities to both discover more about them and teach them to the next generation of percussionists.

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