

# **Cloud-Polyphonies**

## **III - Buffalo**

for six percussionists

**James Wood**

to Michael Rosen  
**Cloud-Polyphonies**  
2010-11

**III - Buffalo**  
for six percussionists

James Wood

## INSTRUMENTATION

Each of the six percussionists needs 11 drums, one small wooden-headed tom-tom, one simantra and one bull-roarer.

The **wooden-headed tom-tom** should be approximately 12" diameter. This can be built by glueing a head of 9mm birch-ply onto a disused small tom-tom shell (10" - 12") (or even a disused tambourine frame). Make sure to flatten the surface of the tom-tom shell rim completely before glueing the head to the shell. When glueing, use professional wood-glue (Evostick wood glue or equivalent) and clamps, and leave firmly clamped overnight to ensure a strong adhesion. Adams built some very fine wooden-headed tom-toms for the Yale Percussion Group out of rosewood - (see page iii)

The **simantra** - two possible types of simantra can be used.

Firstly a simple slab of hard-wood (ideally Padauk or rose-wood - alternatively beech) - dimensions approx. 40 - 60 cm long, 15cm wide and 35mm thick. Mount the simantra on a wooden base, suspending it at the nodal points - in this way the simantra will sound more resonant than when simply laid on a foam rubber pad.

Secondly a type of simantra originally designed by Arthur Soothill, where a substantial slap of hard-wood is used (23.5"/60 cm long, 5"/13 cm wide and 4"/10 cm thick), and a slit cut through the entire width of the slab (like the slit in a woodblock, but extending right through to the back of the block). Adams built a fine set of these instruments for the Yale Percussion Group out of rosewood - (see page iii). The advantage of this second type of simantra is that they are much louder, and therefore balance better with the drums.

The **bull-roarer** should not be of the normal type (on a string), but rather that consisting of a thick rubber band mounted at the end of a wooden stick (see photos opposite).

For the 11 drums, the exact choice of drums is left to the discretion of the performers, although the following points should be borne in mind:

1) The tuning of the drums is critical. The corresponding drums in each of the 6 players should descend very slightly in pitch from Player 1 to Player 6. For example - Player 1's drum 1 should be tuned as high as possible - Player 2's drum 1 should then be tuned about quartertone to a semitone lower than Player 1's, Player 3's drum 1 should be a quarter- to a semitone lower than that, and so on down to Player 6. If possible, this descending scale should continue down through the other drums, so that Player 1's drum 2 is a quarter- to a semitone below Player 6's drum 1, and his drum 3 a quarter- to a semitone lower than Player 6's drum 2, and so on, right down to drum 11. This latter scheme (where, for example, Player 1's drum 3 should be slightly lower than Player 6's drum 2) may not be practical in every case, but whatever happens the 6 corresponding drums should descend in pitch from Player 1 to Player 6.

A soundfile (mp3) of the pitches adopted for the Yale Percussion Group's recording can be downloaded from [www.choroi.demon.co.uk/cloud-polyphonies](http://www.choroi.demon.co.uk/cloud-polyphonies).

A table of these pitches can be seen on p.iii.

2) The length of resonance of the lower drums should not be too short - certainly the resonance length of drums 10 and 11 needs to be that of a bass-drum (suspended in a hoop) or low timpani, but also drums 8 and 9 should not have too short a resonance.

The following is a list of possible solutions to the 11 principal drums:

Drum 1	bongo or high (6") tom-tom
Drum 2	bongo or high (8") tom-tom
Drum 3	10 - 12" tom-tom or senegalese bugurabu
Drum 4	11 - 13" tom-tom or senegalese bugurabu
Drum 5	12 - 14" tom-tom or senegalese bugurabu
Drum 6	13 - 15" tom-tom or senegalese bugurabu
Drum 7	14 - 16" tom-tom, large chinese tom-tom or senegalese bugurabu
Drum 8	16 - 18" tom-tom, senegalese doun-doun, or large chinese tom-tom
Drum 9	small (kit) bass-drum, 18 - 20" tom-tom or senegalese doundoun
Drum 10	large timpano* (30" or 32"), or medium bass-drum
Drum 11	concert bass-drum (if possible suspended in a hoop)

If possible, all drums should have calf-skin heads.

\*The timpano does not need to be a pedal timpano, although the tuning hoops of hand-tuned timpani could prove very awkward in swift passages between the lower drums.

**SIMANTRAS, WOODEN-HEADED TOM-TOMS AND BULL-ROARERS**

**NOTATION AND TUNING**

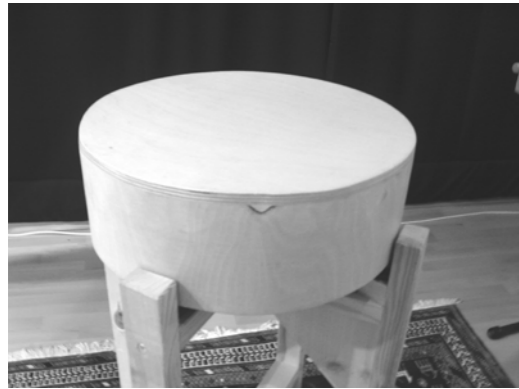
**Simantra**

Built by Adams, for Yale Percussion Group



**Wooden-headed tom-tom**

Built by the composer



Built by Adams, for Yale Percussion Group



**Bull-roarers**



Close-up view of rubber band and mounting



wooden-headed tom-tom  
simantra

11 drums (see note on p.ii)

1 2 3 4 5 6 7 8 9 10 11

notated

sounding (approx)

Approximate drum tuning adopted for the recording by Yale Percussion Group

Drums

P-1 P-2 P-3 P-4 P-5 P-6

1 bongos

2 bongos

3 tom-toms

4 tom-toms

5 tom-toms

6 tom-toms

7 tom-toms

8 tom-toms

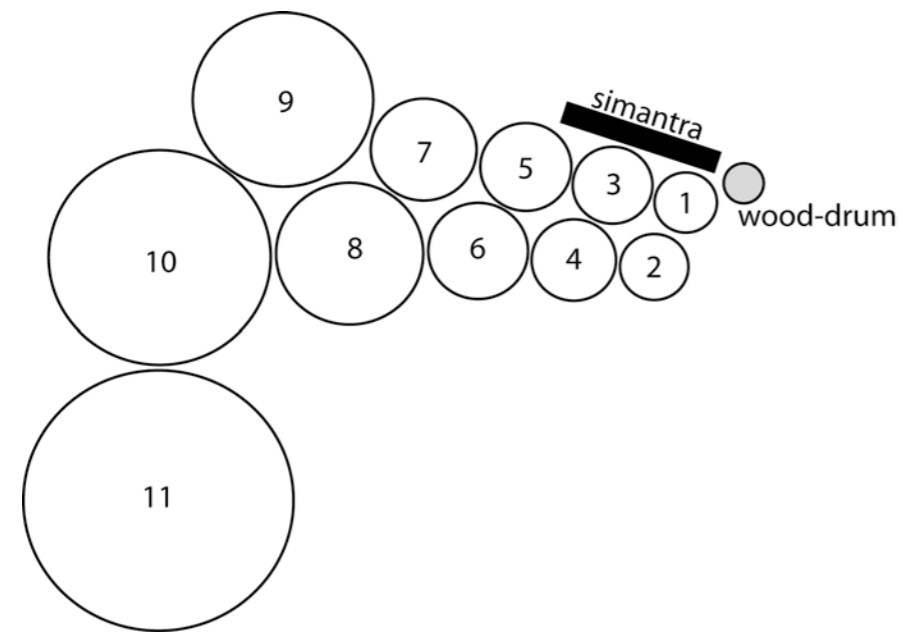
9 kick-b.d

10 timp

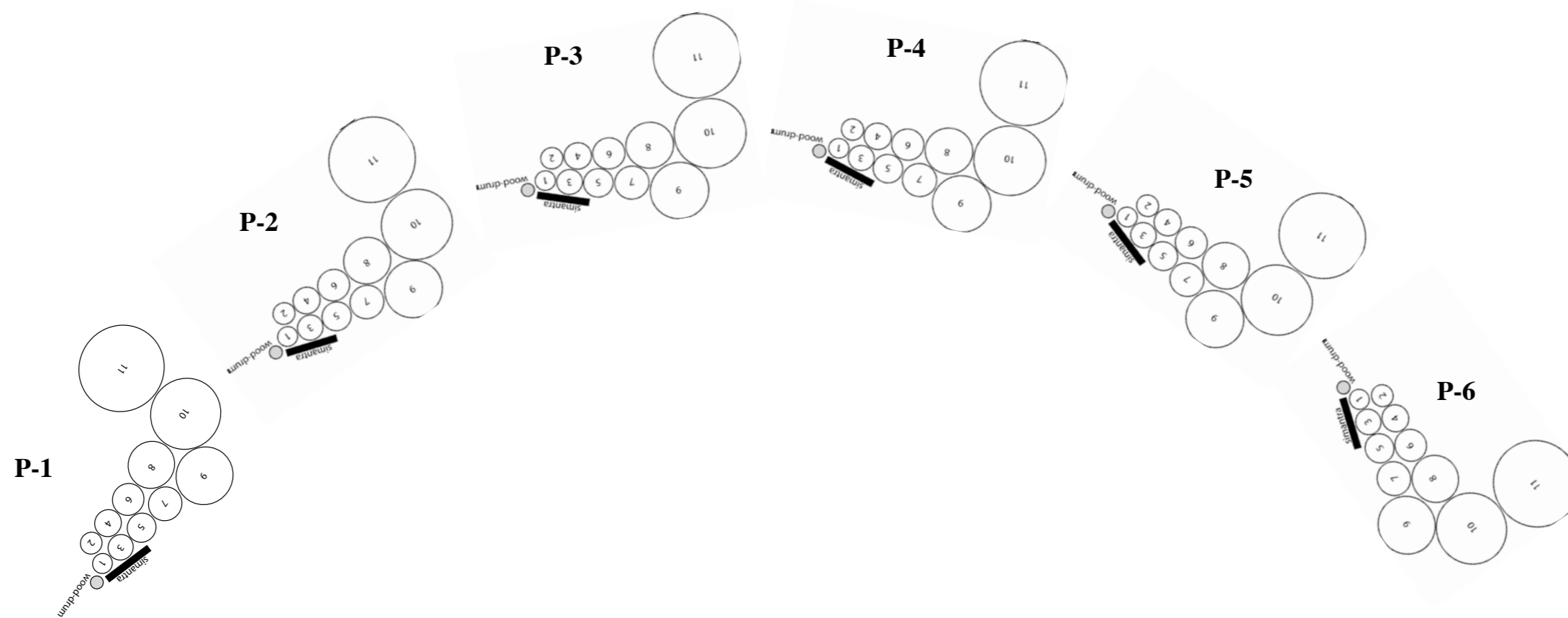
11 b.d

# SET-UP

setup for each percussionist



# LAYOUT OF ENSEMBLE ON THE STAGE



Note - it is important that the semi-circle of percussionists should not be too tight, so that they are not only audible but also clearly visible to the audience.

## Notes for performance


### Dynamics


*pp cresc... (dim...)* a dynamic marked thus indicates the start of a *crescendo (diminuendo)*


*...mf* a dynamic marked thus indicates the dynamic reached as part of (or at the end of) a current (or preceding) *crescendo* or *diminuendo*. It is not a sudden change of dynamic.

### Articulation and phrasing

Rhythmic phrasing and articulation is expressed in notation primarily by the beaming together of groups of sixteenth-notes. The first note in each group should always be slightly stressed, just enough for the polyphonic, rhythmic phrasing to be clearly apparent in performance. The amount of stress in any case this type of stress should be less than a *marcato*, which in turn should be markedly less than an accent. Thus the three grades of stress increase in strength as follows:

 'stress' natural, subtle but clear, like the natural stress in speech

 '*marcato*' marked - more weight from the arm

 'accent' a sharp accent from the wrist


Hence there should be a clear difference in phrasing and articulation between the following:




During longer phrases care should be taken to play the phrases as smooth



Clearly, with this method of notation the beams no longer provide visual orientation to the main pulse, and therefore dotted barlines are used in all relevant passages to indicate the main (quarter-note, dotted quarter-note or half-note) beats.

 Dead-stroke

 When playing a dead-stroke, involving 'melodies' of dead-strokes (bb.209 - 226) I remain firmly pressed on the drum-head, and the necessary stickings are also indicated. The result should be a kind of 'walking' movement over the drums.

superball  


Bass-drum roar: rub the superball mallet on the drum-head. In passages involving *crescendi* and *diminuendi* (as shown here) the mallet can be drawn in a figure-of-eight pattern over the head, so that interesting and characterful *glissandi* result. For the *pppp lontano* passages (bb.189-206) try to keep the roars as calm and characterless as possible (probably around the rim of the drum-head), so that the effect is like a distant, indistinct hum supporting the sound of the bull-roarers

## Mallets

Since the choice of drums in *Buffalo* has been left to the discretion of the performers, I have given only very basic mallet indications, since the choice of mallets will depend largely on the choice of instruments, and indeed the drum-heads. Furthermore it may well be found that different types of ‘hard’, ‘medium’ or ‘soft’ mallets will be needed according to the character and predominant *tessitura* of each passage in which they are used. For example, when the predominant *tessitura* of a particular passage is on the lower drums, heavier (larger diameter) mallets would be an advantage - and the soft mallets at the end could be harder than those at the beginning, because of the importance of maintaining clear articulations. Above all, the overall sound should be ‘warm’ and ‘big’ - not harsh and aggressive.

The basic indications (with some specific ideas for the hard mallets) are as follows:

- Hard (heavy) wooden mallets (eg. Cloyd Duff #8 Hickory Timpani Mallets, or Vic Firth American Custom T5 Wood Mallets), or hard (heavy) rubber mallets  
Since dead-strokes are rather unsatisfactory with hard mallets, some hard wooden or rubber mallets with thin felt covering may be required for the section between bb. 209 and 230, (but these should be not as soft as the medium felt mallets, below).
  - Medium-hard felt mallets (heavy wooden core)
  - Medium-soft felt mallets (heavy wooden core) - but not so soft as to lose definition in the fast passages, especially on the low drums and at the end.
- superball    Each player needs 2 superball mallets

## Mallet-changes

The composer is aware of  
double-headed mallets  
sequence of mallet changes in each case.

This passage may require some skillful solutions involving  
The exact solution for each player will depend on the particular

## ENSEMBLE

It is strongly recommended to use a click-track for the performance of movement 1 (*Starlings*) and movement 3 (*Buffalo*), whilst movement 2 is better performed with a conductor (or as chamber music without a conductor). A Logic File click-track is available through James Wood Edition, although it is likely that each performing group will prefer to make their own click-track.

## **Cloud-Polyphonies**

2010-2011

for percussion sextet

Like many composers before me, I have long held a fascination for the phenomenon of clouds. For Debussy they represented the perfect natural model for his “orchestration without feet” - a music which floats free from any discernible or definable bass-line; for Xenakis, Stochastic Clouds were a phenomenon where a myriad of random elements come together to form a tangible, controllable mass, whilst in Messiaen’s *Transfiguration de notre Seigneur, Jésus Christ*, the mystical cloud which enveloped Christ on the mountain is depicted almost literally by clouds of string glissandi.

My interest recalls a little of all these representations, but specifically refers to the movements of large formations of organisms - whether animals, insects, birds, fish, water, steam or crowds of human beings - where, although the general direction of the mass is clear, the relationship in space between the individual elements within the mass are in a constant state of flux. Their freedom and individuality is nevertheless kept in check by a shared sense of purpose, as if some mystical spirit were controlling the behaviour of the individual elements, as a choreographer directs a group of dancers. Specific examples of this are shoals of fish, water particles subjected to the ebb and flow of tidal currents, flocks of migratory birds, herds of animals, clouds of water vapour, swarms of bees, and even crowds of Pilgrims at the Hajj.

When Mike Rosen first had the idea of inviting me to write a percussion sextet for a consortium of American Universities, my first thoughts were that a percussion sextet could be the perfect medium to explore this phenomenon in musical terms - and this led directly to *Cloud-Polyphonies*.

The ‘Polyphonies’ of the title refers directly to this phenomenon, and is realised in musical terms by a complex web of ‘Points of Imitation’, or distorted canons. The musical material for each percussionist consists of two distinct, polyphonic ‘voices’, making a total of twelve voices in all. The individual motifs which make up each voice are imitated in turn by each of the six percussionists, although both the motifs themselves and the rhythmic distance of each imitation are subject to continual transformation. Melodic fragments, varying in length between a single note and longer phrases of up to 13 notes, each with their own distinctive form and character, are sent across the six percussionists like waves - either from right to left or from left to right - sometimes very slowly, and sometimes very fast like ricochets.

Each of the three movements of *Cloud-Polyphonies* is scored for a completely different instrumentation and can be performed separately, or in any combination, as required. The first movement, *Starlings*, is written for six marimbas and woodblocks, the second, *Clouds*, for metal instruments and prepared piano, and the third, *Buffalo*, for drums, simantras and bull-roarers.

### ***I: Starlings***

The first movement of *Cloud-Polyphonies* concerns the extraordinary aerobatic displays of starlings, as they gather together before migration. At first just a few starlings gather on telegraph wires, nervously testing their aerobatic potential individually. As more and more starlings gather, these pre-migration test-flights become increasingly spectacular until finally several thousand birds form up together to perform an extended synchronised display. From this moment on, focus on any particular individual bird is lost, as one becomes mesmerized by the brilliantly synchronised aerobatics and shape-transformations of an enormous black cloud of several thousand starlings. Gradually, following some arcane signal, the cloud disappears and is gone for the winter.

### ***II: Clouds***

Just once in my life I have had the experience of going hot-air ballooning. It was a beautiful day in August, and for a couple of hours we glided silently over the Oxfordshire countryside. Never before

have I been so conscious of the presence and activities of the clouds. As we drifted up to our cruising altitude, focus on these mystical, intangible and supernatural phenomena was intensified as we gradually became enveloped by an overwhelming sensation of deepest silence.

Our pilot explained how to ‘read’ the clouds - an essential skill for all hot-air balloonists. Active clouds (*cumulus*, or *cumulus congestus*) are those huge structures with sharply defined edges, which build from the powerful upward draught of a thermal within them - they are dangerous, and therefore avoided by balloonists. Passive clouds (*cirrus*) are generally at a much higher altitude, and have more of a wispy appearance - these are harmless, although should be watched, in case they develop into active clouds. In *Clouds*, passive clouds are represented by sounds produced by bowing, scraping or rubbing, and active clouds by sounds produced by striking. Between these two extremes come sounds sustained by tremolandi - these represent the clouds’ transitional state, as they develop from passive into active.

### ***III: Buffalo***

The final movement of *Cloud-Polyphonies* invokes that quintessential American symbol, the North American Bison, or Buffalo. Here the continuously changing waves of sound which zigzag across the line of 66 drums recall the sound of herds of galloping buffalo - however the sound comes not from the animals, but from the earth itself - an ever-changing terrain of mud, stone, brush, pampas and water becomes the surface for a thousand pounding buffalo hooves, as the herd stampedes swiftly across the plains.

James Wood  
March 2011

### **Durations:**

I:Starlings	c.8 minutes
II:Clouds	c.14 minutes
III:Buffalo	c.13 minutes
Total:	c.35 minutes

*Cloud-Polyphonies* was commissioned by a consortium of American and Canadian Universities, Conservatories and individuals, headed by Michael Rosen (Oberlin Conservatory of Music), in cooperation with Slagwerk Den Haag, Holland.

The North American consortium comprised the following institutions and individuals:

Oberlin Conservatory of Music - Michael Rosen  
University of Akron - Larry Snider  
Baylor University - Todd Meehan  
Eastman School of Music - Michael Burritt  
University of Kentucky - James Campbell  
University of Massachusetts, Amherst - Ayano Kataoka  
Matthew McClung  
McGill University - Aiyun Huang  
University of Michigan Percussion Ensemble  
Michigan State University - Gwendolyn Burgett Thrasher  
New England Conservatory Percussion Ensemble - Frank Epstein  
nief-norf Project - Andy Bliss, Kerry O’Brien, Erin Walker, Eric Willie, Mike Truesdell, Bill Sallak  
Northern Illinois University Percussion Ensemble - Greg Beyer  
University of North Carolina, Pembroke - Tracy Wiggins  
Steven Schick - *in memory of Fred Cooper*  
Yale University School of Music and Norfolk Chamber Music Festival - Robert Van Sice  
Manhattan School of Music - Claire Heidrich