

Chapter Seven

Cardinal Numbers – the work of Ken Moyers Charting in the Moyers Manner Useful Aspects of Cardinal Numbers

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Cardinal Numbers – the work of Ken Moyers

In the eighties and nineties Ken Moyers founded and directed a large (five octave) handbell choir composed of senior citizens of normal intelligence in Rome, Georgia. It was really not a special needs choir in the truest sense of the word, but since most of his ringers did not read music, and since his method has proven to be so very useful to me in my work, I am providing this information for you.

Cardinal numbers refers to the practice of assigning one number to each bell, and in the work of Mr. Moyers he used the following designations: F = 1, G = 2, A = 3, Bb = 4, C = 5, D = 6, E = 7. I am not sure just why he chose the F scale as the basis of his work (since the basic two octave set of bells contains G4 through G6), but I never question success when I see it.

Beyond numbering the Moyers method, like McGrew and Williams, assigned a color to each octave of bells, as follows:

C3 – E3 = brown (with an X beside the number)
 F3 – E4 = brown
 F4 – E5 = green
 F5 – E6 = black
 F6 – E7 = red
 F7 – C8 = red (with an X beside the number)

These diatonic tones (in the key of F) were held by each player in his/her dominant hand. In the other hand each player held an accidental (such as F# or Ab). Diatonic bells were marked with blue tape, accidentals with yellow to remind ringers which one was the “main” bell (in the dominant hand).

Charting in the Moyers Manner

Mr. Moyers did one thing that was not acceptable to me for a performing group. His number scores were not on scrolls (as in Williams and McGrew) but on large flip charts that he stood in front of the choir. An assistant was there to turn the pages. This display of information was all right for the choir, but from the standpoint of the audience the appearance of this large chart between them and the choir was, in my opinion, not a good choice.

The large charts allowed Moyers to display all bells vertically, as in printed music. Below is a short excerpt from a typical Moyers score with the chart showing the vertical alignment of numbers. For our purposes we will use **bold** numbers for the lower octave (F4 through E5) and standard numbers for the upper octave (F5 through E6). Number one circled is an F#.

5	5	3	5	6	5	3	3	2	①	2
3	3	1	3	4	3	1	1	7	7	7
1	1	5	1	1	1	5	5	5	5	5
3	—————			6	5	3	3	2	3	2
1	—————			1	—	1			①	

As in the methods of Williams and McGrew, Ken Moyers had complete control of rhythmic aspects in performance. Ringers were taught to move to the next set of vertical numbers when his pointer indicated a move. Note horizontal lines in the score indicating that a note is held while others play. If a note is not held, it is damped at the beginning of the next set of numbers.

Useful Aspects of Cardinal Numbers

Less is usually more. If you have used any of my publications, you will find me using this phrase more than once. In working with special needs choirs, the **less** we require (in terms of intellectual ability) from each ringer, the **more** likely they are to succeed.

In Williams and McGrew, each ringer usually has **two** letters to track (usually side by side in the scale, such as C5 and D5 or G5 and A5). In the Moyers method each ringer is responsible for only **one** number and the same number circled.

In Williams and McGrew, if alternate assignments are needed, one or more ringers have to begin tracking the **new** assignment. If you play a piece that requires an Ab5, the ringer who formerly had G5 and A5 is now looking for G5 and Ab5. That's seeds acceptable, except that Williams and McGrew did not use flats, so the ringer would now be looking for G5 and G#5. So you may say, well, that's okay – and I would agree. What if you need the Ab5 and the A5 in the same arrangement? Someone else would have to play the Ab5 (actually the G#5). Let's say that in this arrangement you do not need an E6, so the person who usually plays D6 and E6 will be assigned D6 and G#5 (a brand new bell to track). It sounds very simple, but to a special learner this task may be too demanding.

With cardinal numbers it is much easier. You find the person who is usually assigned a bell that is not needed. Lets say his numbers are 5 and 5 circled. You simply give him the Ab5 bell and label it as circle 5. He/she tracks the same numbers, but in the process plays a different bell. **Piece of Cake!!**

As stated previously the part of the Ken Moyers method that did not impress me was his use of large flip charts in front of the choir. I recommend adapting cardinal numbers to a scroll chart (as in Williams and McGrew) in which the numbers will not be lined up vertically but placed in a rectangle in fairly random order, as shown below using the same musical example that was previously charted with the numbers stacked vertically.

5	3	1	5	3	1	5	3	1	5	3	1	6	4	1
	3												6	
	1												1	