

# The music of changeringing – 4

An unusual form of music, using unusual instruments needs performers with specific skills, so in this final article, we will consider the performance skills needed by changeringers. First, we can list some of the skills used by other musicians that ringers don't need:

- To be able to pitch a note, like a singer or trombonist, because the note is fixed by the bell.
- To control the intonation, like a pianist, because it is determined by the dynamics of the bell and clapper.
- To be able to read music, because there isn't any.
- To be aware of the (musical) note of their own bell.

So what is left? The ringer is still responsible for timing each note, which is not a trivial task given the physical constraints of the instrument.

- Ringers need a good sense of rhythm (like all musicians).
- Ringers need to feel the rhythmic movement of the bell, and to predict what it will do. (You can't 'impose' the timing, you have to work with the bell and guide it into the correct rhythms.)
- Ringers need a feel for the speed of swing, and for the associated physical action needed to make it ring one place earlier or later in the sequence. (It is more than just knowing position, it's like knowing how hard to hit a ball to land it in the right place.)
- Ringers need well developed listening, to diagnose tiny irregularities in the rhythm, and to identify whether or not it is caused by their own bell. (A musician with perfect pitch would have an advantage, but most ringers don't, and have to rely on other cues.)
- Ringers have to plan ahead, not just for the occasional strategic move (like a pianist turning the page) but for every blow. A bell can't be moved instantly, so with each blow, you need to prepare it for the following one (like a snooker player potting one ball and positioning the cue ball to pot the next one). And since the sound occurs well after the action that caused it, correction is only possible for the following blow, not for this one.

On top of those psycho-motor skills, ringers need an additional layer of cognitive skill to know when to place the next blow – remember that they have no music – and also to recover from mistakes. Imagine walking across a city to a concert if all you had was a mental list of 'first left, second right, and so on'. If something distracted you, how would you remember where you were in the sequence? If you took a wrong turn, how would you know you had done so, and how would you get back on track?

Ringers can use two complementary strategies. The sequence of the sound is mirrored in the vertical movement of the ropes, so by developing 'ropesight', you can 'see' where you are in the sequence, and where other bells are in relation to you. If you learn the structure of the method – how it all fits together, rather than just memorising your path through it – you can check your progress and correct any slips using visual cues. Using the city analogy, it is like forming a mental picture of the street plan, and where the landmarks are.

Ropesight is a two edged sword. When you can 'see' the position of the bells in the sequence, it is tempting to time the striking of your bell by 'following the ropes'. Visual stimuli are seductive, and the preceding rope moves ahead of your action, unlike the sound, which follows it. Rope following is inaccurate because the relationship between rope movement and sound varies – for example there is a longer delay with heavier bells. In any case, you can't move a heavy weight with precision at the last moment, when the bell striking before it (by only a fraction of a second) is already in place. A lot of effort goes into trying to train ringers to rely on their rhythm and their ears, rather than their eyes!

The conductor of a ringing performance has a different role from an orchestral or choral conductor – no beating time, no signalling of crescendo or diminuendo, and no bringing in different parts. The conductor has to make the calls that periodically switch the ringing to a different path. With no visual aids, the conductor has to memorise the composition. The extremely simple one shown here has the minimum information needed to specify where the calls are. Each row is like a movement in conventional music and the named columns are the positions at which calls are made.

The conductor is also responsible for checking that the ringing is still correct, and if necessary helping to sort out any mistakes. This expanded notation of the same composition shows additional information (about the

	W	B	M	H		W	B	M	H
1	-				63254				
	-				62534				
	-	S			64325			62345	
		-			63245				
		-			64235				
		-			62345				
-	1	-	23645	52364					53624
	-	S			53246				54236
		-			52346				
		-			54326				
		-			53246				

order in which the bells meet each other) that a conductor would use to check the ringing. If the conductor miscalls, or if errors cascade and destabilise the ringing, then the conductor has to decide whether to abandon the attempt.

Contrary to popular belief, ringers don't need to be particularly strong. The beauty of full circle ringing is that moderate force can control quite heavy bells. It is all about timing, rhythm and finesse, not about brute force. The more skilful you are, the less effort you need. Ringing was nicknamed 'The Exercise' by the young gentry in the 18th century, but thanks to modern bell hanging, ringing most bells is now only gentle exercise. The few very large bells do need more stamina. The Tenor at Liverpool Cathedral, which at 4¼ tons is the world's largest bell hung for full circle ringing, was recently rung single handed in a 4¾ hour peal.

Ringers have a close affinity, like a large extended family. For example, walking into a ringing tower anywhere in the world, a ringer will almost always be invited to ring.

In these articles I have only scratched the surface of changeringing. For more information see: [www.allsaintswokinghambells.org.uk/AbRinging/](http://www.allsaintswokinghambells.org.uk/AbRinging/)