The Learning Curve

A regular feature sponsored by the Central Council Education Committee
www.cccbr.org.uk/education/

Ringers and musicians

Giles Hopkinson (The older learner, RW 888) contrasts the experience of ringing and playing in a musical ensemble. He notes that we don't have to worry about playing in tune, or varying the tone or dynamic of the sound, but that we lack printed music, suffer a time lapse between pulling the rope and the bell sounding and have no opportunity for individual practice.

It is salutary to compare ourselves with other musicians. Change ringing is a unique cultural tradition but perhaps we can learn from others.

Performance

GH did not mention another major difference. Musicians advertise their performances and people elect to go to a concert hall, jazz club or opera. With ringing, people within earshot are involuntary listeners. In that respect ringing ranks alongside pneumatic drills and Muzak in supermarkets. (We won't pursue the analogy further!) Suffice it to say that our performances are very public. We should therefore feel very responsible for the quality of the sound, but the fact that we can rarely see any of our audience makes the whole thing feel more private and inward looking. Perhaps we should hang a large microphone in the middle of every ringing chamber as a reminder that we are 'on air'.

It used to be said that ringers were the only musicians who must practise in public, but increasingly that is not so. Many churches now have some form of sound control. Some designs just take the edge off the sound others make the bells almost inaudible when closed. Instead of shutters, some towers fit sensors to the bells so they can be rung for practice with tied clappers and sounds produced electronically in the ringing chamber. Often this is an extension of a conventional ringing simulator.

Ringers share with other ensemble musicians the way individual performance affects the result. In non musical team activities like football, a poor team can be greatly improved by adding one exceptional player. In ringing, and other music, with one poor performer in an otherwise perfect band, the poor performer determines the standard of the performance.

Practising alone

GH's final point was that practical learning and development can only be done in full ensemble, whereas conventional musicians can practise their parts alone before meeting in full ensemble to practise together. This too used to be true of ringing, but thanks to the invention of the ringing simulator by Peter Cummins in the 1970s, it need no longer be so.

After some resistance in the early years, people now recognise the benefits of using a simulator, especially as a training aid, and they are becoming much more common. In simple terms, a simulator is a box that can automatically create the sound of bells ringing rounds or methods. It is normally set so that the sound of one bell is triggered by a sensor attached to the wheel of a bell with tied clapper. The person ringing the bell thus has all the physical sensations of ringing a real bell, and hears it sound at the correct time, along with the sound of the other bells all being rung perfectly.

A simulator has two main uses. As an initial training aid, it lets you give a learner lots of practice ringing rounds without needing a band of ringers present. The ringing is perfect, and it forces the learner to rely on rhythm and listening, which can so often get neglected with too much reliance on ropesight. As a more advanced aid, a simulator lets you practise ringing methods on your own - methods your band might not be able to ring, and even Maximus methods in a 6 bell tower!

Most simulators are based on old computers that can be obtained free, either a BBC-B with the program in a chip, or an IBM PC running software such as Abel or Beltower. They all use a sensor to detect the movement of the bell wheel - see below for how to obtain details.

Delayed action

GH talked of the time lapse between 'pulling the rope and the bell sounding'. Ringers are not in fact unique in having such a delay. Think about a bass drummer who starts to swing the drum sticks perhaps half a second before the critical moment when it hits the drum skin.

Half a second is less than the one or two seconds (depending on weight) between a bell leaving the balance at one stroke and striking as it rises towards the next, but there is more to it than the delay. Weight and degree of control throughout the stroke are also critical. A drumstick weighs under a pound, but a bell weighs hundreds of pounds. The drum stick can be accelerated or retarded throughout, whereas all you can do with a bellrope is to pull it more or less, and after about the first third of the stroke you can't even do that.

These are real physical differences, but the technique to overcome them need not be quite so different. In both ringing and drum playing, the individual stroke is not an isolated act. It is part of an extended overall rhythm. The drummer does not sit resting with his arm in the air and at a moment's notice swing it into action. Even for an isolated beat the movement starts somewhat earlier as the arm rises before coming down again, and a good drummer no doubt anticipates the rhythm even before this.

You hear some ringers talking about 'when to pull off' as if it was a discrete event like pressing the button in a lift, but it should not really be like this. On a heavy bell, you are probably not ringing up to the balance anyway. The timing as the bell comes down depends as much on how it went up from the previous stroke as it does on 'when you pull'. The bell is never completely still, even while over the balance, and it should not start with a jerk. Everything needs to be smooth to achieve accurate striking. Even on a light bell rhythmic ringing requires some anticipation

Instruments and practice

Not all comparisons with musicians are favourable. Most musicians buy their instruments, whereas ringers do not. They also practise intensively - hours a day for a professional. Even a child learning an instrument practises perhaps half an hour a day. When learning to handle a bell some ringers get less than an hour a week that might fall to twenty minutes on the end of a rope when joining in with a weekly practice.

Wise teachers try to give handling lessons as often as possible, ideally once a day, but it can still be hard to give enough time when learners start ringing rounds. Do people learn any other physical skills with so little weekly practice?

Using a simulator when learning to ring rounds increases rope time, so can going to other towers when you are good enough, but perhaps we should re-think some aspects of how we train ringers, and the time we allocate for them to practise and develop.

Qualification

Most musicians achieve some sort of qualification. Progressing from grade 1 to grade 8 in your chosen instrument is perfectly normal whether you are an adult or a child, yet in ringing there is a certain amount of suspicion of such schemes, especially if they were to lead to some form of certification. There are progress schemes used for initial learning, especially with children, notably the Bell Club badges, but they do not have the same universal status as a music. There seems to be something in ringing culture against the idea of being assessed, whereas in music it is routine.

The music

Finally there is the music itself. Serious musicians understand the principles of music, different types of harmony, counterpoint and so on. Music in ringing is more constrained but it is there. Composers put considerable effort into the musical side of their work, yet only a minority of ringers understand it. Relatively few ringers are aware of the existence of roll ups, or listen for them when ringing.

As we can see, there are indeed differences between ringing and other forms of music. What can we learn from them?

Tail End

Simulators and the Training of Ringers is available from CC Publications,

Reprinted from *The Ringing World* 5 October 2001. To subscribe, see www.ringingworld.co.uk/ or call 01264 366620
Collections of monthly *Learning Curve* articles from 1999 are available from CC Publications www.cccbr.org.uk/pubs/ See advertisements in *The Ringing World.*