

# Learning a method as a variant of another method

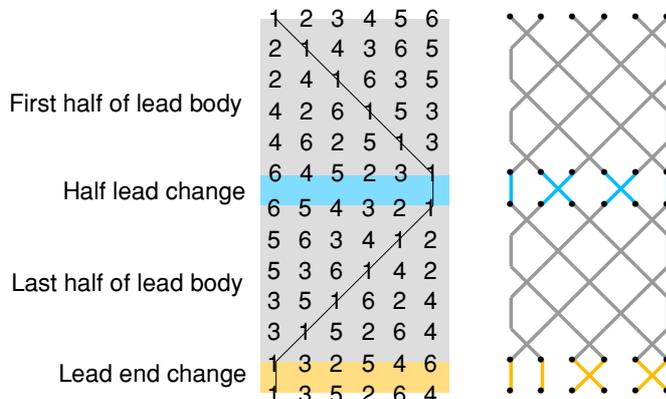
When you know a method, it is easy to learn other methods that are variants of it. If you think about the structure of the method, rather than just learning a new blue line from scratch. It is worth doing this because it saves a lot of effort, and makes it easier to expand your method repertoire.

## Variation of lead end or half lead change

First you need to understand the way a method fits together – its structure – the set of changes (not rows) that make up one basic section (which for a Treble-dominated method is a lead).

Using Plain Bob as an example, you can split the lead as shown, with the blue area being the half lead change, and the orange area the lead end change.

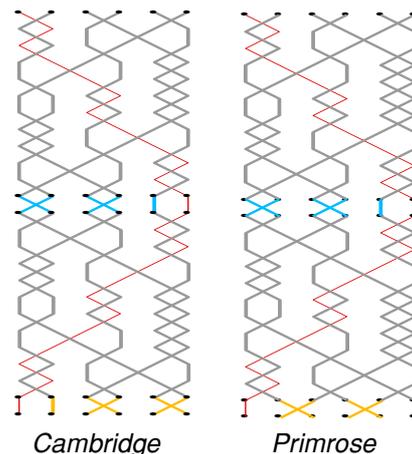
The numbers shown here are of the first lead in the plain course, but the numbers aren't helpful when thinking about the structure, since they are different every lead whereas the structure stays the same. So it is simpler to leave out the numbers, and just use the lines, as shown on the far right. The crucial points to note are where the body of the lead joins the lead end change and the half lead change, which are shown here as black dots.



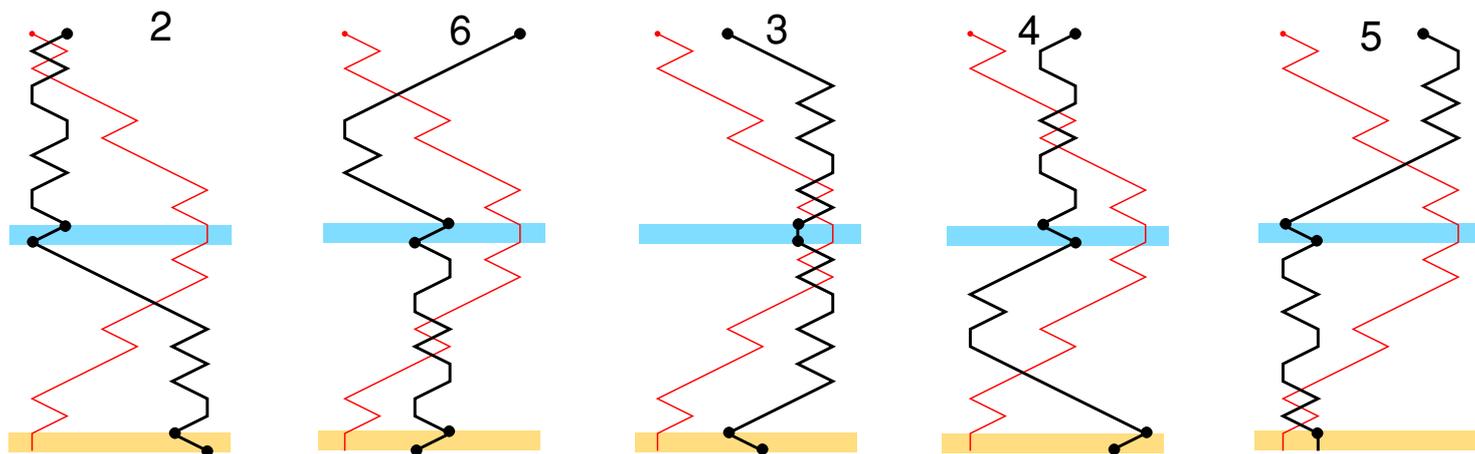
## Primrose

Now let's consider Primrose, which is a variant of Cambridge. The diagrams on the right show the structure of both. The only difference between them is the lead end change, which in Cambridge is a '12' (ie a bell makes 2nd over the Treble forcing the others to dodge), whereas in Primrose it is a '16' (ie the bells all hunt).

Because the lead end change is different, the bells are in different positions for the start of the following lead, which you can see by comparing what happens to any line at the bottom of the diagram. That means that the lead end order – the order in which you ring the different parts of the method – also changes. It is useful to learn the lead end order, which in Cambridge is 2 - 6 - 3 - 4 - 5 - 2 and in Primrose is 2 - 4 - 6 - 5 - 3 - 2.

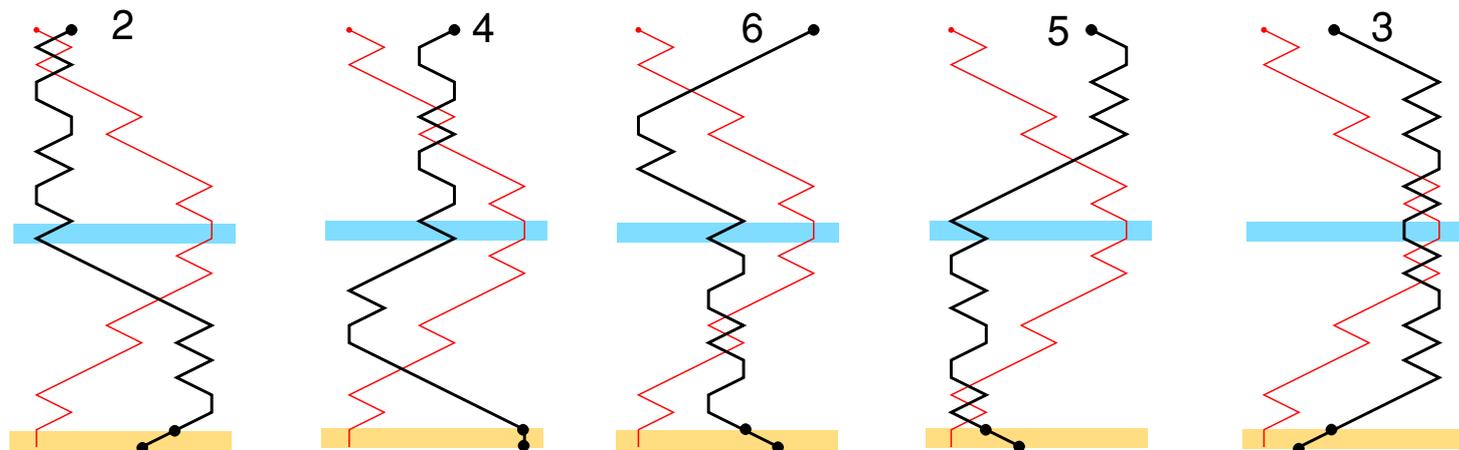


Now look at the blue line for Cambridge (below). It is broken into five columns to emphasise the individual place bells, all of which should be familiar, if you know the method. The new information you need to learn is what happens at the lead end change, which you might not have thought about before. In particular, you need to know the position where each place bell arrives at the Treble's handstroke lead, which is shown by the dots at the top of the orange strip, whereas normally you would only think about the next place bell that you become, shown by the dots at the bottom of the orange strip. If you are in one of the dodging positions, then it is the 'other' place.



*Cambridge Surprise*

Now look at the blue line for Primrose. The work of each place bell is identical to Cambridge until it meets the top of the orange strip, but then instead of dodging backwards a place (or making 2nd if it is at the front) it keeps hunting for another blow. So for example, 2nd place bell still arrives in 5th place at the Treble's handstroke, but instead of dodging back into 6th, it carries on hunting down to 4th, where it becomes 4th place bell for the next lead. Note that when 4th place bell arrives in 6th place at the Treble's handstroke, the normal hunting action is to lie behind, so it becomes 6th place bell.

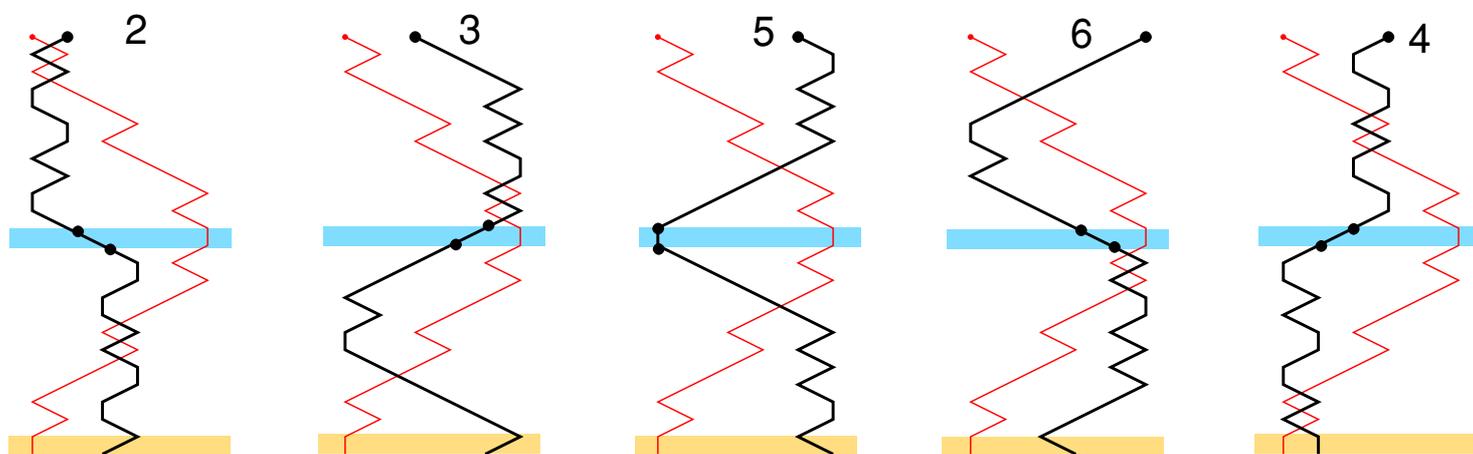


*Primrose Surprise*

One other thing to note is that the hunting at the lead end removes some dodges. The dodge that you would have done at the lead end doesn't exist. So for example 3-4 places loses one of its dodges.

## Ipswich

You can do the same with the half lead change. Replacing it creates a new method that you can learn by joining together parts of the method that you already know. Replacing the half lead change in Cambridge (which is a 56) with hunting (a 16) gives Ipswich, but you don't have to learn all of it if you can join together the parts of the method that you already know. In Ipswich, the lead end change is the same as Cambridge, so all you need to focus on is the different half lead change, shown in blue, with the entry and exit points marked by dots. Altering the half lead causes yet another place bell order: 2 - 3 - 5 - 6 - 4 - 2 (the same as London).



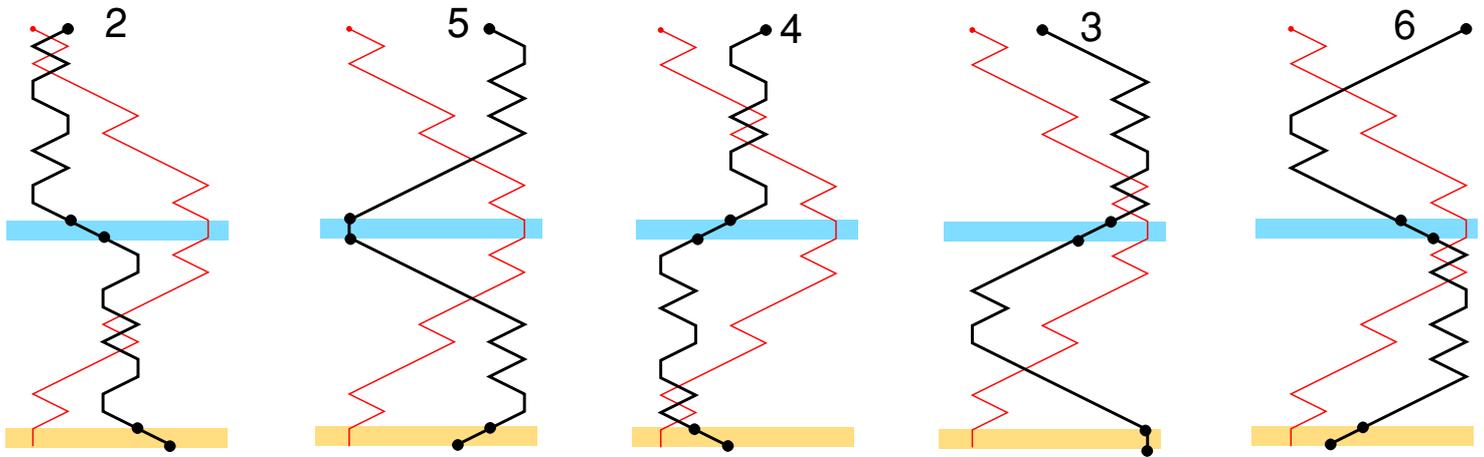
*Ipswich Surprise*

This is where it gets a little harder. Anyone who has learnt Cambridge properly knows the place bells, and hence where the lead ends come on the line, but not everyone knows where the half leads come. So that is another bit of learning to do (but still a lot less than learning a whole new method). Look back at Cambridge on the previous page, to see where the half lead points come. Making 5th under the Treble is an obvious one, and the others are at the dodges that come at the 'far' (non-lead) end of the front work, and at the 'far' end of 3-4 places. As before, you need to recognise when you arrive (at the dot on top of the blue strip) which is just before you would make the half lead dodge or place.

In Ipswich, you hunt from that point for one blow (to the dot on the bottom of the blue strip) and then pick up the appropriate bit of Cambridge line. This is harder than picking up a new place bell at the lead end (because you are probably less familiar with the half lead) but since the work is symmetrical either side of the half lead, learning where the lines go afterwards is a mirror image of learning how the lines arrived beforehand.

## Norfolk

Having learnt Primrose and Ipswich as variants of Cambridge, Norfolk completes the set, because it has both the lead end change and the half lead change replaced with hunting (a 16 change). It produces yet another place bell order, 2 - 5 - 4 - 3 - 6 (the same as Little Bob). To learn learn Norfolk you need to combine what you learnt for Primrose and Ipswich. Probably the main thing to be aware of is that when ringing it, the 'special' bits come twice as often, since both the leads and the half leads are different from Cambridge.

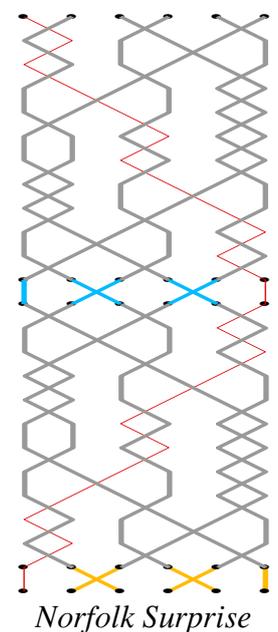
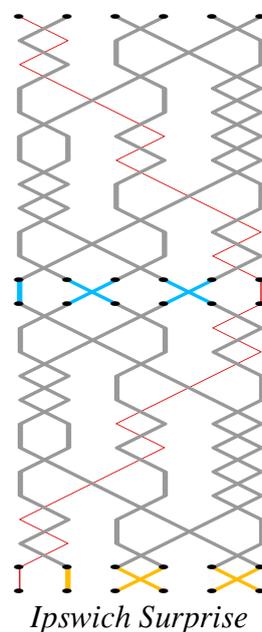
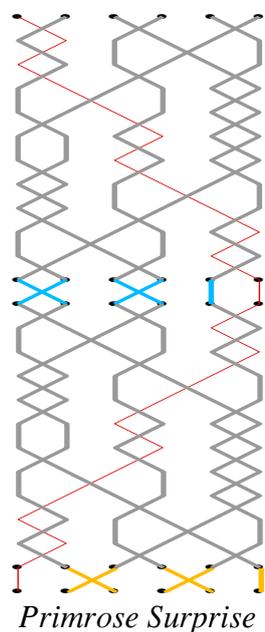
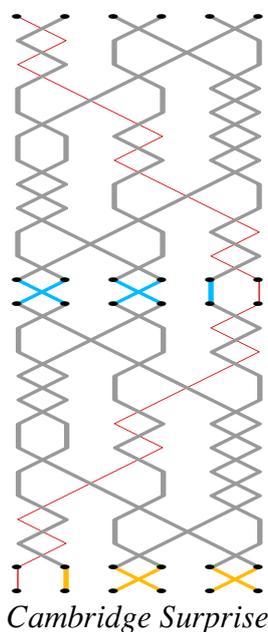


*Norfolk Surprise Minor*

## All four methods

Here is a summary of the key features of all four methods.

	Cambridge	Primrose	Ipswich	Norfolk
Half lead change (places made)	56	56	16	16
Lead end change (places made)	12	16	12	16
Place bell order	2 6 3 4 5	2 4 6 5 3	2 3 5 6 4	2 5 4 3 6

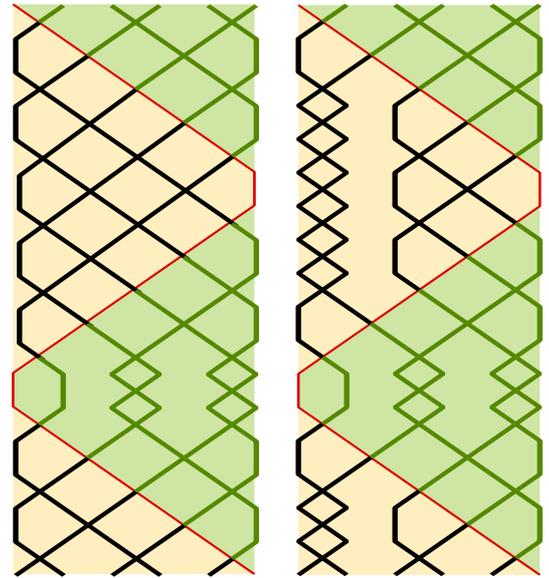


## Combinations over and under the Treble

Another way to divide the structure of a method into blocks is to split it along the line of the Treble's path, giving two roughly triangular shaped chunks of work 'over' and 'under' the Treble.

In a single lead, the 'over' work is split in two (at the start and end), so to see it as a whole it is helpful to draw a lead and a half, as shown here, using Plain Bob as an example.

In the right hand diagram, the work under the Treble has been replaced with different work to produce St Clements. If you had never met St Clements, you could learn the work under the Treble (where the front two dodge and the others hunt above them) and switch between that and Plain Bob every time you pass the Treble.



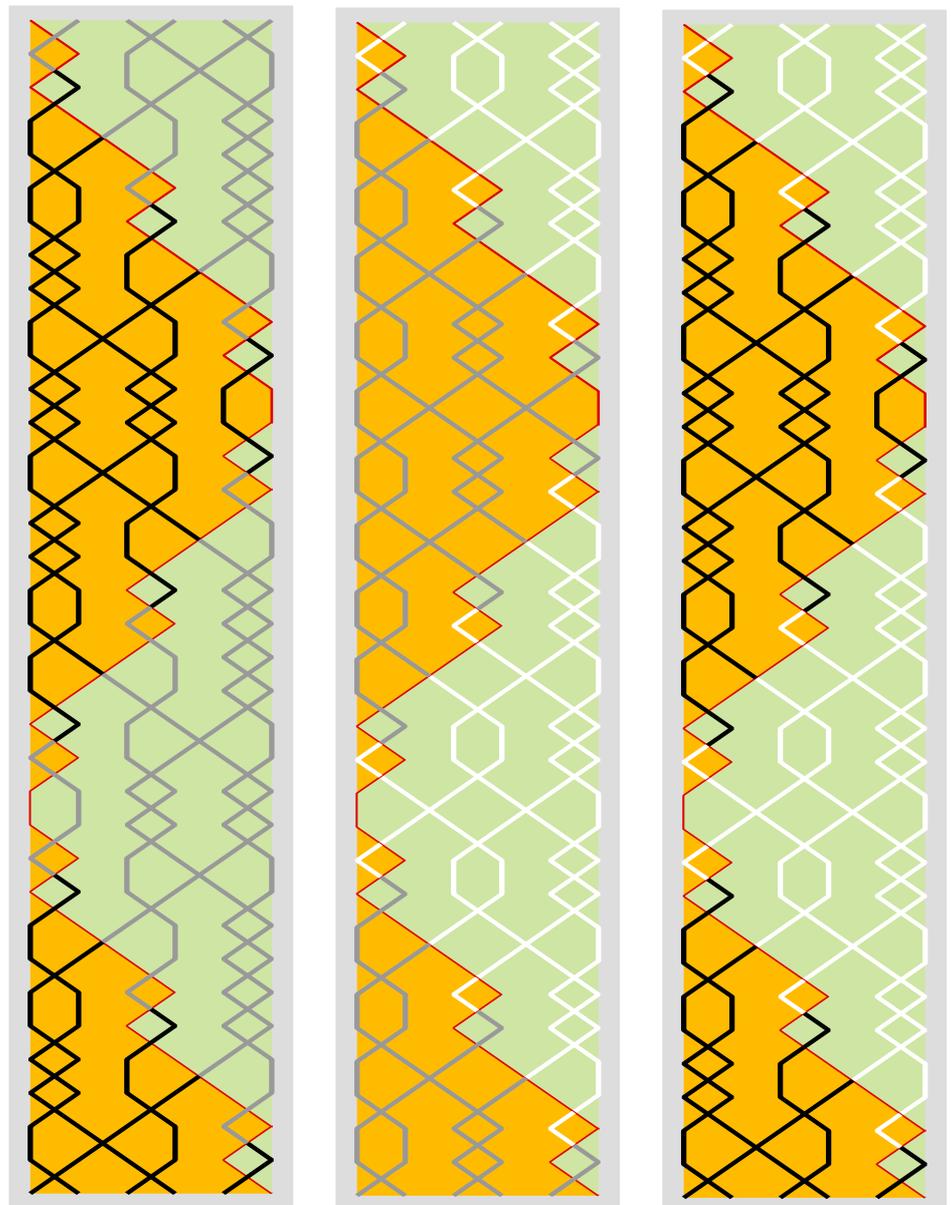
You split a Treble Bob or Surprise method in the same way (but the chunks have jagged edges).

The left hand diagram shows Cambridge Surprise, with the work under the Treble in black. (For simplicity where there is a dodge with the Treble, there is a single change from between under work and over work, at the middle of the dodge.)

The middle diagram shows Oxford Treble Bob, with the work over the Treble in white.

On the far right is Morning Exercise<sup>1</sup> Delight, which has Cambridge work below the Treble (black) and Oxford work above the Treble (white).

If you already know Cambridge and Oxford, then you can learn Morning Exercise by joining together pieces that you already know rather than learning a complete new line, providing you know where you cross the path of the Treble. You may know that, but you need to know it more thoroughly, since it is now crucial to navigation, not just being a comforting signpost that you notice on the way past.

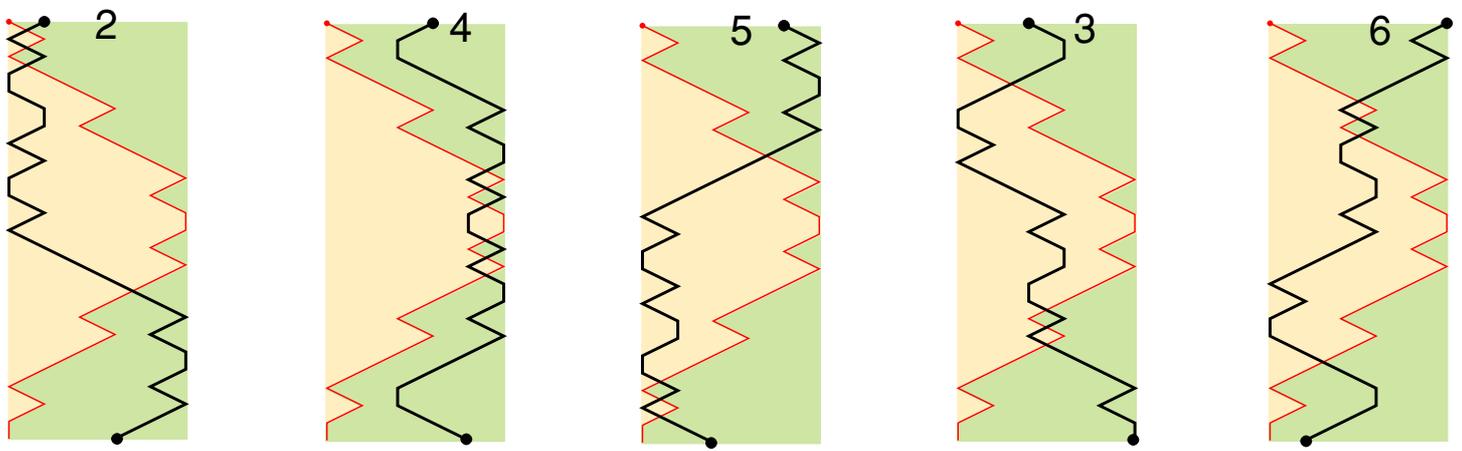


*Cambridge*

*Oxford*

*Morning Exercise*

<sup>1</sup> Morning Exercise is its official name, but it is commonly known as 'Boat Race'. Depending on your allegiance, it is either 'Cambridge in front and Oxford behind' or 'Oxford above and Cambridge below'.



*Morning Exercise Delight Minor*

Look at the Cambridge parts first (the work under the Treble). You should already know where you meet the Treble on the line when ringing Cambridge. In three places you pass the Treble by dodging with it. The 1-2 dodge is in the front work just before and after the lead end. The 3-4 dodges are in the middle of 3-4 places (up and down respectively). The 5-6 dodges are either side of making 5th under the Treble, which is normally in the middle of 3rd place bell, but since hardly any of it is under the Treble, the bit you will use is very short.

You might be less familiar with the two places where you pass the Treble without dodging with it (in 2-3 and in 4-5). They are adjacent to all the places where you run through 3-4 without doing a dodge. Look at the lines to make sure you understand all the places where you meet the Treble, and that you know them well enough to be able to join or leave Cambridge whenever you pass the Treble.

Now look at the Oxford parts (the work over the Treble). Some people ring Oxford by learning the blue line and others learn it by rule. If you learnt it by rule, you might find the transition to ringing only the parts over the Treble even easier. The relevant rules are: Always dodge in 5-6, make places in 3-4 if the Treble is beneath you. (There are other rules about going into the slow, but since that is under the Treble, you won't ever do it here.) 3-4 places in Oxford consist of the bell coming down making 3rd and going back up, while the bell coming up makes 4th and goes back down. When ringing Morning Exercise, apply these rules while you are above the Treble.

If you learnt Oxford as a blue line, then you will need to study it to see where you pass the Treble in relation to the pieces of work that come above it. You may find you end up by re-inventing the rules above.

You should of course also learn the place bell order, which in this case is 2 - 4 - 5 - 3 - 6 - 2. That is not one of the 'regular' orders because Morning Exercise does not have Plain Bob lead ends.

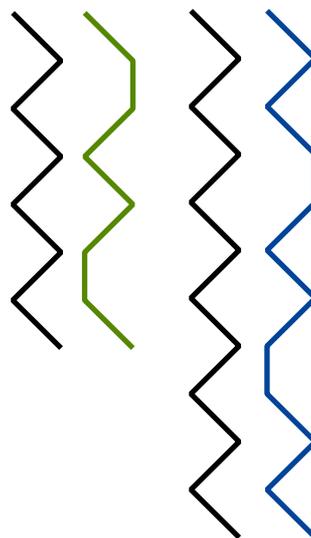
## Localised variation

In the examples above, the alteration affected all the bells because it sliced through the whole structure. There are other variations where the change is much more localised, like a small patch on the structure, often only affecting a couple of bells. With these methods the change to the blue line is also very localised. Here are some examples.

Replacing the triple dodge 5-6 in Yorkshire Major (black) with the green variant next to it, gives Quedgley.



Replacing the 5-pull dodge on the front in Lincolnshire Major (black) with the blue variant next to it, gives Amsterdam.



Replacing the tiny piece of Cambridge shown black (and its mirror image in the second half of the lead) with the alternative shown to the right, gives New Cambridge. The change to the blue line is to interchange 'lead and dodge' with 'dodge and lead', in 6th and 4th place bells, and in the two halves of the front work.

