

## Understanding 'stage'

In method ringing, the term 'stage' refers to the number of bells involved, and there are ringing-specific words for each number of bells. For example, Doubles means 5 bells are involved, and Major means 8 bells are involved. But what exactly does it mean for a bell to be 'involved'?

While stage is most commonly used in reference to methods, the variety of constructs possible under a permissive framework requires us to use stage to refer to 5 different method ringing concepts: row, change, method, composition and block. We'll look at the use of stage for each of these in turn. For an explanation of the 5 concepts that stage applies to, please refer back to the framework.

### 1. Row

The stage of a row is simply the number of bells in the row. E.g. the row 135246 has a stage of 6 (= Minor). It doesn't matter what role any bell has in the row. E.g. if the tenor in this row is a cover bell while a method is being rung on the front 5 bells, the row still has a stage of Minor.

### 2. Change

The stage of a change specifies how many bells the change operates on. Changes are often described using place notation. E.g. place notation '34' means the bells in 3rd's and 4th's places remain unchanged, and all other pairs of bells swap places. Specifying that the change '34' is a Minor change makes it clear you're referring to this change:

214365  
124356

Alternatively, specifying that the change '34' is a Royal change indicates you're referring to this change:

2435187096  
4235810769

where the rows above have been selected randomly.

### 3. Method

A method is a sequence of changes where all the changes have the same stage. The stage of a method is therefore the stage of its underlying changes. E.g. a Minor method is comprised only of Minor changes.

Stage for row, change and method are reasonably straightforward. Things can get slightly more complex when considering the stage of a composition and a block.

#### 4. Composition

A composition is an arrangement of method(s) and call(s) that produces a sequence of changes, all with the same stage.

Most compositions either use a single method, or use multiple methods where the methods all have the same stage. Furthermore, most compositions use calls that only affect the bells that are ringing the method(s), as opposed to affecting cover bells. In these cases, the stage of a composition is the same as the stage of the method(s) being rung.

But there are more complex scenarios:

- (1) If a composition is designed to affect one or more cover bells, the stage of the composition includes those cover bells (such a composition is called a variable cover composition). E.g. a composition of the method Stedman Cinques where the cover bell in 12th's place can be affected by calls has a stage of Maximus. Where the method has the Cinques change '3', the composition will specify this as '3T' to account for the cover bell.
- (2) If a composition involves ringing a Doubles method in some rows, and a Minor method in other rows (with, say, the tenor as a cover bell in 6th's place when Doubles is being rung), the composition will have a stage of Minor, since the changes produced by a composition must all be of the same stage. Such a composition is called a multi-stage composition.

So where, in the example above, the Doubles method uses the change '1', the composition will specify this as '16' in order to account for the cover bell and to make all the composition's changes Minor changes.

Compositions can also be combined to produce larger compositions:

- (3) A common example of this is to take 7 Minor compositions that each produce an extent (720 changes), and join these together to produce a composition of 5040 changes. In this case, the stage of the big composition is Minor, as is the stage of all the component compositions.

But compositions can also be combined in other ways:

- (4) A Minor composition and a Doubles composition could be combined in such a way that the Minor composition is rung on bells 1 to 6, and the Doubles composition is rung on bells 7 to 11. The big composition in this case would have a stage of Cinques.
- (5) Alternatively, the big composition could specify that the Minor composition is rung on bells 1 to 6, and the Doubles composition is rung on bells 8 to 12. This results in the bell in 7th's place remaining fixed throughout. The big composition would therefore have a stage of Maximus, and every change of the composition would include the place notation '7'.

## 5. Block

Because a block is a sequence of rows where the rows all have the same stage, the stage of a block is the same as the stage of the rows it comprises.

(1) The following block:

1234  
2143  
2413  
4231  
4321

is a Minimus block.

The stage of a block can be higher than the composition used to generate it, with the difference being one or more cover bells:

(2) If a Caters composition is applied to the front 9 bells of the initial row 1234567890ET, bells 10, 11 and 12 will become cover bells. Here a Maximus block is created by a Caters composition.

Note, however, that while in (2) above, a Caters composition is used to produce a Maximus block with 3 cover bells, the block's changes (i.e. the changes that, together with the initial row, describe the block) would be considered Maximus changes, with each change ending with an inferred place notation of '0ET'.

## 6. Effective stage

Unlike stage, effective stage is a term that only applies to a block. The block in question is examined to see if any places in the block have the same bell ringing in every row of the block. Any such places are called fixed places. The effective stage of the block is the remaining number of places in each row after all fixed places have been removed.

## 7. Fixed places

Note that fixed places can be created in one of three ways:

- (1) They can result directly from a method: i.e. the method keeps a bell in the same place throughout.
- (2) They can result from a composition, as in example 4 (5) above.
- (3) They can result from applying a composition at one stage to an initial row of a higher stage, as in example 5 (2) above.

Regardless of how fixed places are created, they are all excluded when determining effective stage, which in turn is used to determine truth.

8. Cover bells

A cover bell is a bell that occupies a place in a row that is not one of the places operated on by the method(s) of a composition. A bell that is kept in the same place throughout by a method, as in example 7 (1), is therefore not a cover bell. But the bells that are outside the method(s) in examples 4 (1), 4 (2), 4 (5) and 5 (2) above are all cover bells.