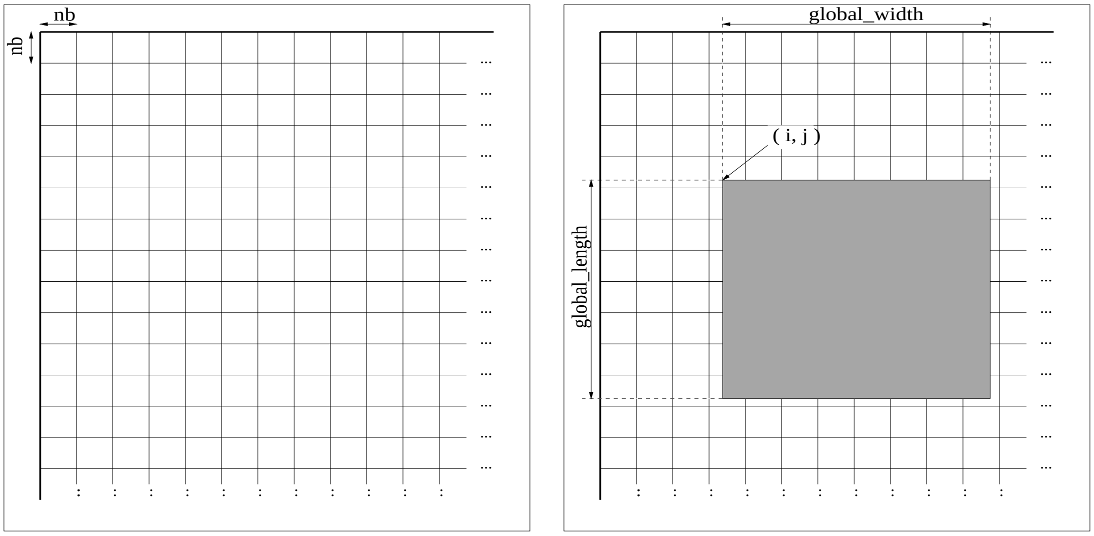

Figure 2.2
Left: Template for matrix alignment. Right: Matrix alignment to the template.

Example 2.1 In Figure 2.3, we show a simple driver routine that generates a template based on user input from standard I/O. The driver starts by initializing MPI and creates a two dimensional communicator that is as close to square as possible. Next, PLAPACK is initialized, and a routine that initializes the template is called. In that routine, the user is queried for a distribution block size, after which the template is created. □

> **Note:** In the future, we expect to accommodate much more general distributions than achieved by this simple template creation call.

2.2.2 Template destruction

Space is allocated for the data structure that encodes the template. Thus, once the template is no longer needed, it should be destroyed. For this we provide the routine

```
int PLA_Temp_free        ( PLA_Template *template )
```

Purpose: Free a template.

IN/OUT	`template`	template for vector and matrix distribution

Upon return, space has been freed and `template` reset to `NULL`.