

Drawing Lines Between Viewports: `grid.move.to` and `grid.line.to`

Paul Murrell

March 24, 2025

Many graphics systems have the notion of a current drawing location. This has been added to Grid, with the additional benefit that the drawing location can be specified relative to an arbitrary viewport. This allows drawing across coordinate systems¹.

The following code demonstrates a simple example (the output is given after the code).

```
> pushViewport(  
+   viewport(w = 0.8, h = 0.8,  
+           layout = grid.layout(1, 3,  
+                               widths = unit(rep(1, 3),  
+                                             c("null", "inches", "null")))))  
> pushViewport(viewport(layout.pos.col = 1, yscale = c(0, 4)))  
> grid.grill(); grid.yaxis(); grid.xaxis()  
> grid.points(0.5, unit(2, "native"))  
> grid.move.to(0.5, unit(2, "native"))  
> popViewport()  
> pushViewport(viewport(layout.pos.col = 3, yscale = c(0, 2)))  
> grid.grill(); grid.yaxis(); grid.xaxis()  
> grid.points(0.5, unit(2, "native"))  
> grid.line.to(0.5, unit(2, "native"))
```

¹There was a request on R-help for exactly this sort of thing - I will try to find the exact reference - and there has since been another (From: Ross Darnell; Subject: Problems with segments and multiple graphs).

