

Colour blindness (Colour Vision deficiency) is a fairly common condition that affects at least about 5-7 percent of the population in a given country. As researchers, we're always looking for ways to improve research methods and making the findings more accessible for the general audience. For those specialising in data viz and graphic designing, presenting the work in an easily graspable and visually appealing manner is a basic necessity, and so is understanding the key components to developing accessible images. Since a significantly large proportion of the audience has some form of colour-blindness, it is essential to avoid colour schemes that can lead to misinterpretation of the data.

Thankfully, most statistical applications come equipped with the capabilities to tweak colour schemes, of which Stata is a great example. Although many non-Stata users see it as a platform mainly for conducting boring econometric analyses, over the years Stata has become the go-to app for making exquisite visualisations among many researchers thanks to the relentless contribution of the developers. Several user-written packages are currently available from SSC to adjust the colour schemes for readers with colour-blindness e.g. `plottig` and `plotplain`.

Here are some quick examples using open data

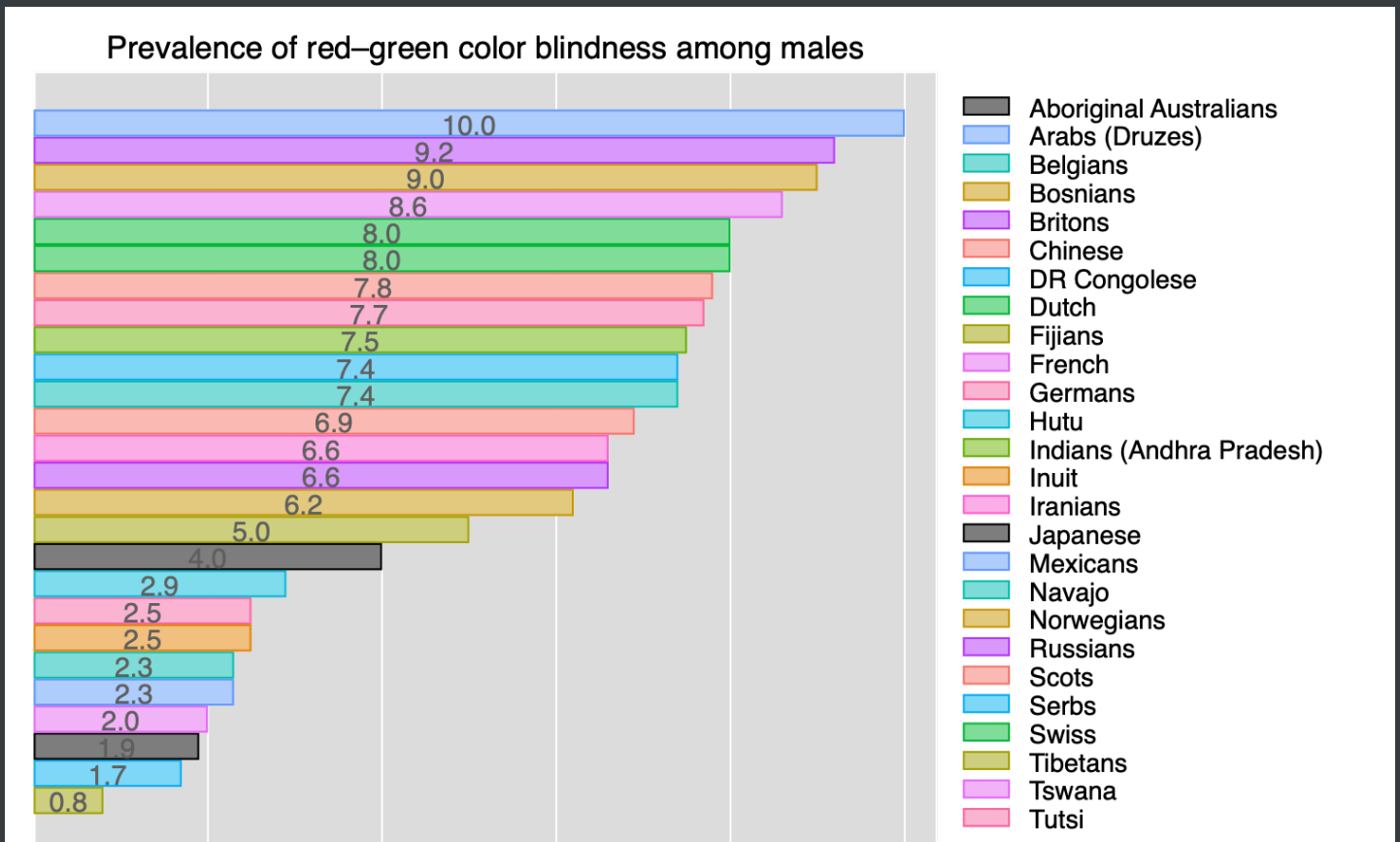
## plotplain

Example 1

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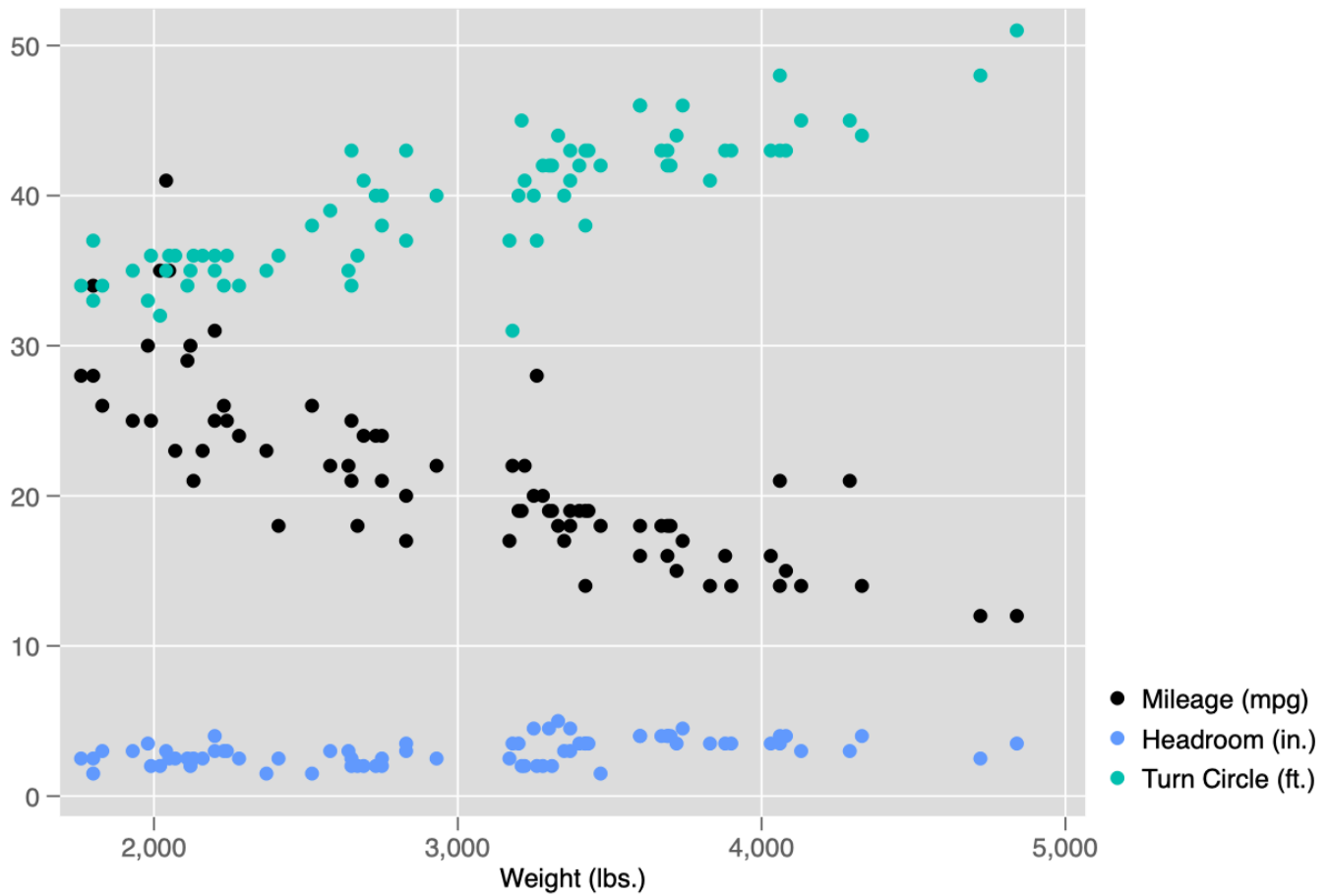
data from [https://en.wikipedia.org/wiki/Color\\_blindness](https://en.wikipedia.org/wiki/Color_blindness)

```
graph hbar (asis) percent , over(id, sort(percent)descending) asyvars  
lblabel(bar, position(center) format(%3.1f) size(3)) title("Prevalence of  
red-green color blindness among males") scheme(plottig)
```



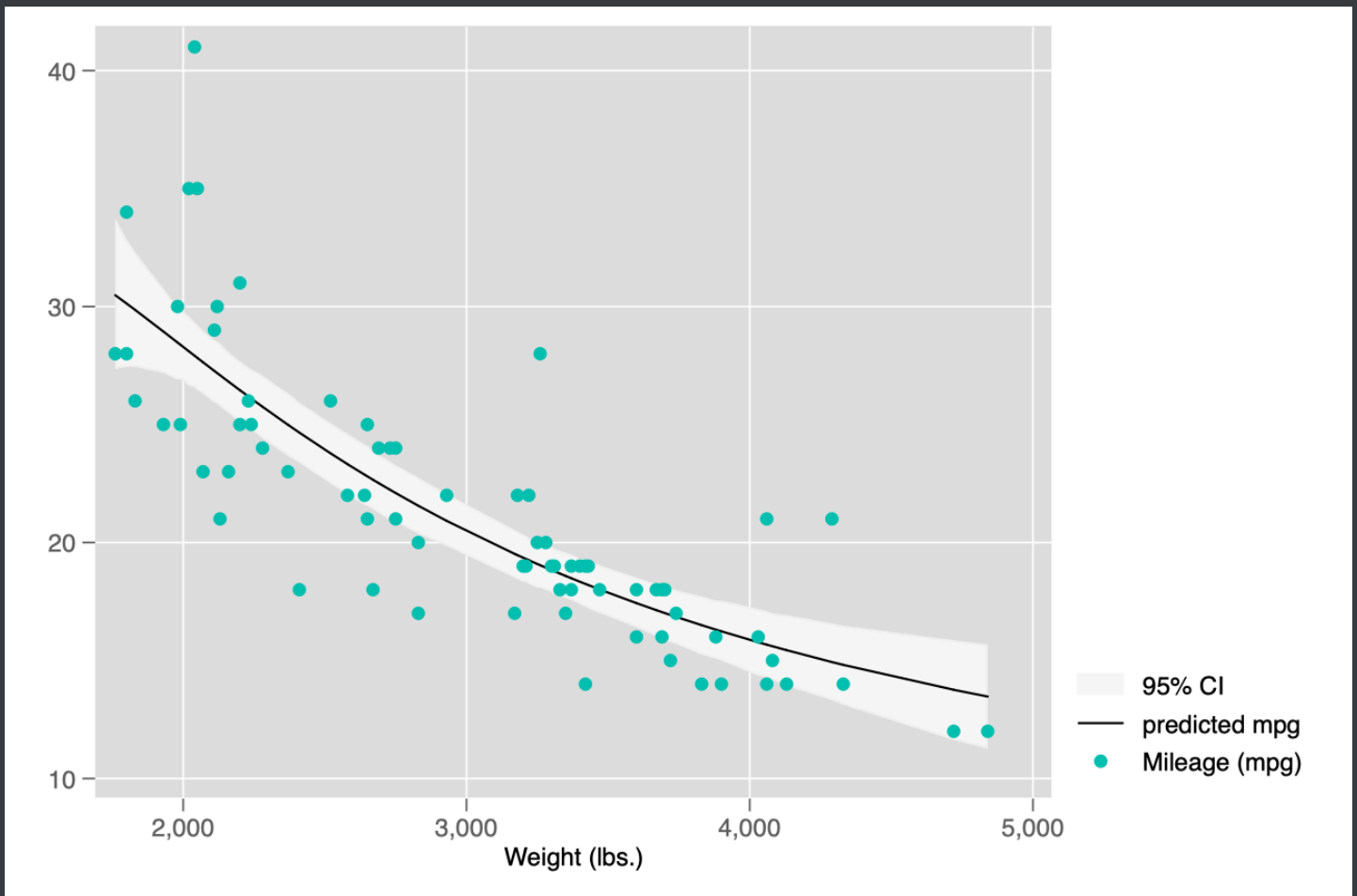
## Example 2

```
webuse auto  
scatter mpg headroom turn weight, sch(plottig)
```



### Example 3

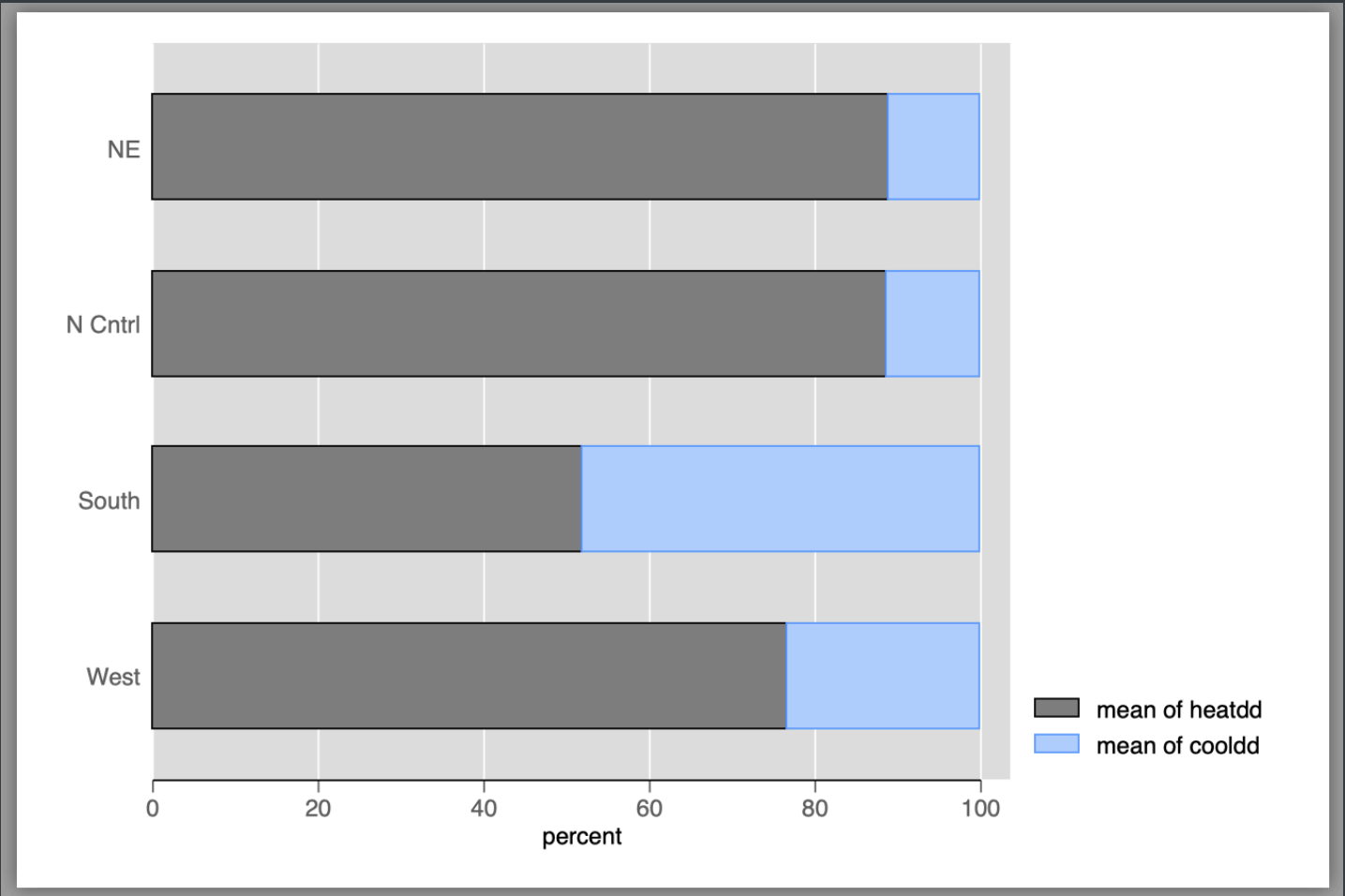
```
webuse auto
twoway fptestci mpg weight || scatter mpg weight, sch(plottig)
```



## plottig

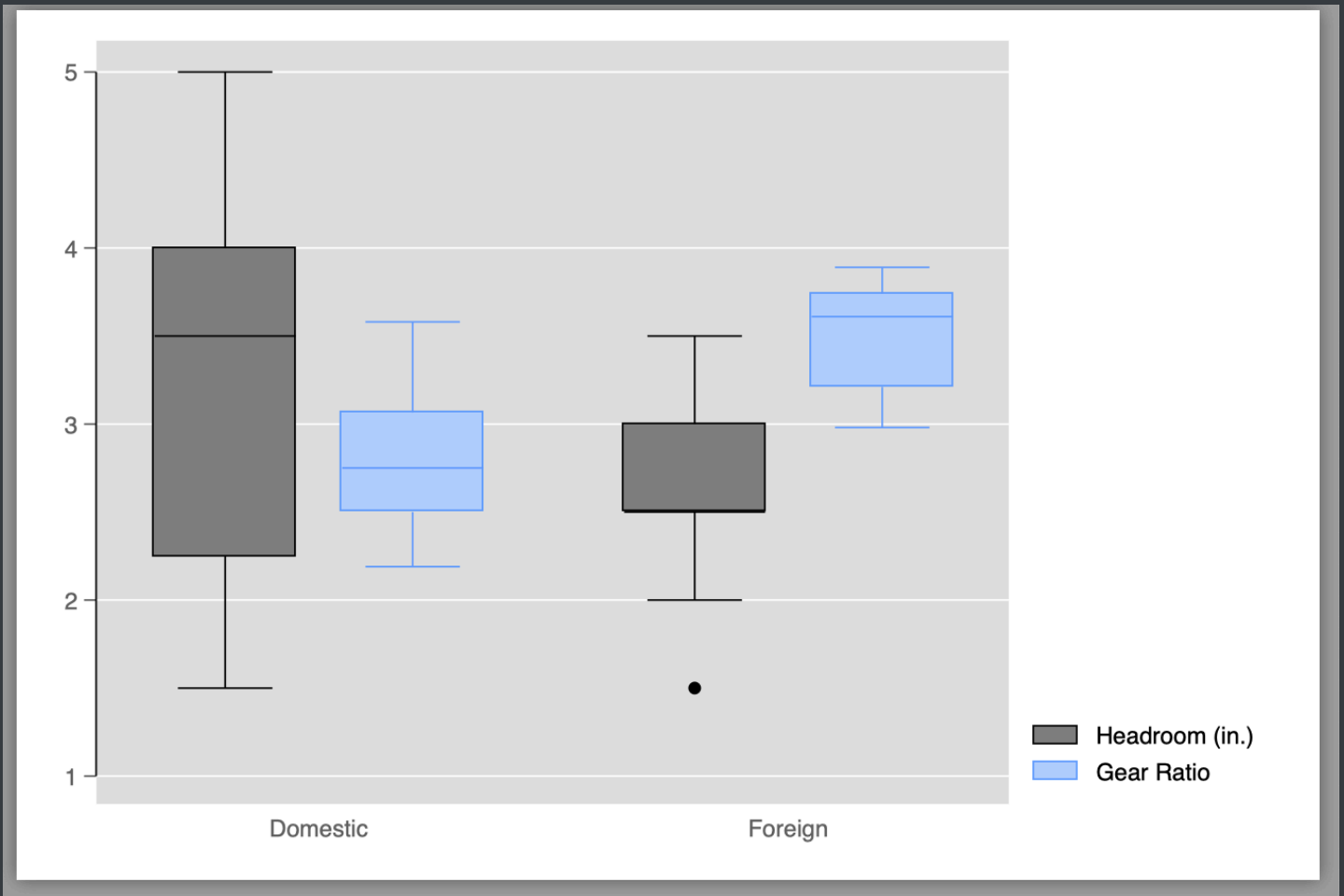
### Example 1

```
webuse citytemp  
graph hbar heatdd cooldd, over(region) stack percent sch(plottig)
```



## Example 2

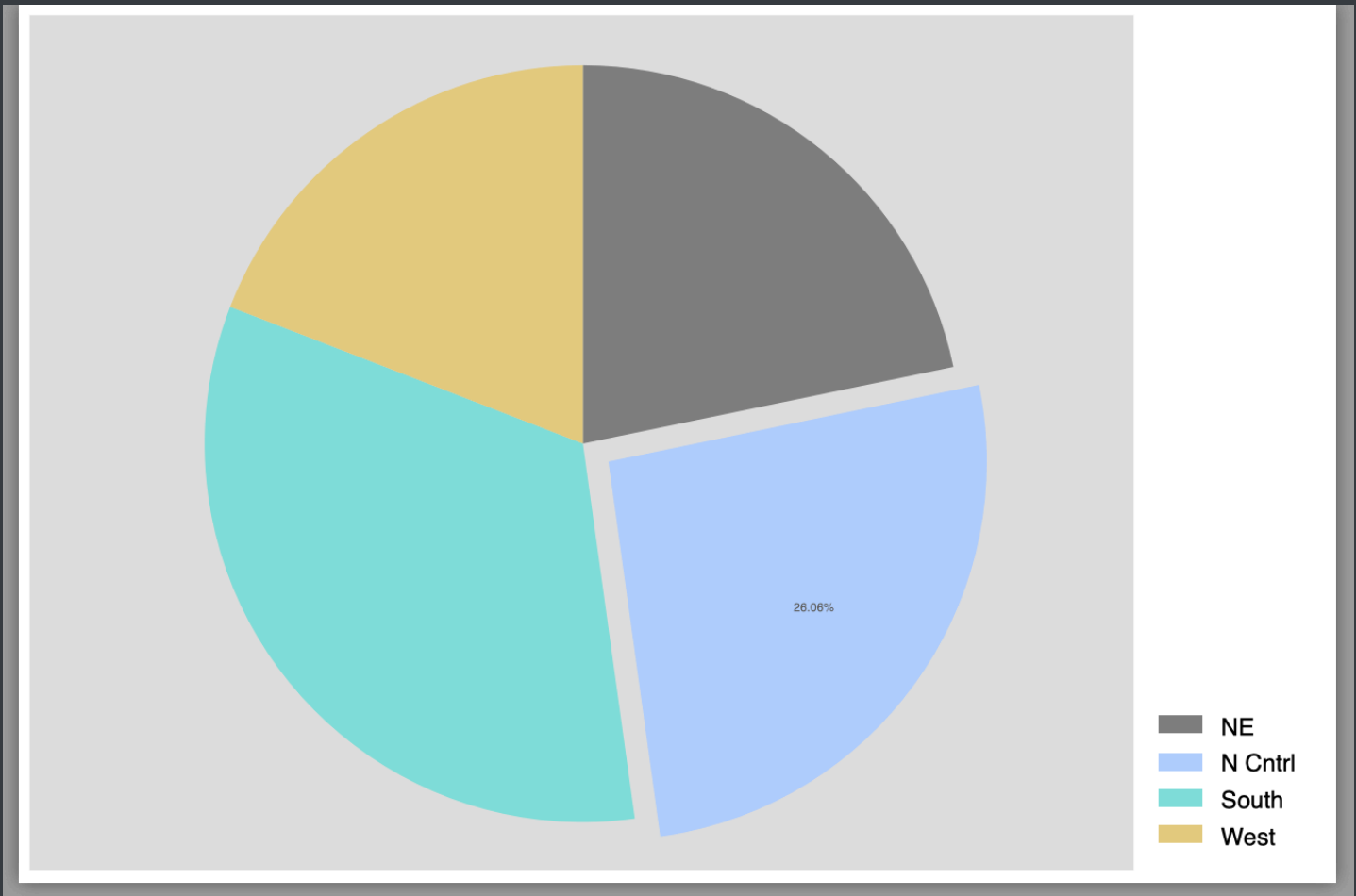
```
webuse auto  
graph box headroom gear_ratio, over(foreign) sch(plottig)
```



### Example 3

```
webuse census
```

```
graph pie pop, over(region) pie(2,explode) plabel(2 percent) sch(plottig)
```



For more detailed example, please stay in touch to know about the upcoming book: *Advanced Stata Graphics for Health and Social Science Researchers*.