One of my favorite features of graphs in Stata are schemes. A scheme is a preset format for a graph. Instead of the user using options to control the size, shape, and color of every single part of the graph, Stata allows us to use one of many schemes. To see what schemes you have on Stata, execute the following:

graph query, schemes

Once you execute the command, you will see a list of all the schemes that are installed on your computer. Stata comes with several schemes, but the real beauty is that you can install extra ones from the internet, which is what I have done. This is probably why my list is larger than the list that some of you see when execute the command on your computer. At this point, I would advise you to install two groups of schemes. The first group is used in the book *A Visual Guide to Stata Graphics*, which is the best book out there on graphs in Stata. To install the schemes that are available thanks to the author of that book, execute the following commands:
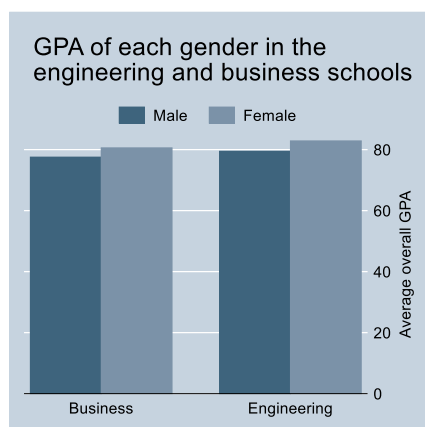
net install vgsg, from(http://www.stata-press.com/data/vgsg)

The second group of schemes are used when you want to draw graphs without colors. They just use black and white and sometimes shades of grey. To install these schemes, type the following:

net install gr0002_3, from(http://www.stata-journal.com/software/sj4-3)

Once you have installed these schemes, you can start using them. To illustrate what schemes do, we will use the very last command that we executed in the previous lecture in order to draw the bar graph:

graph bar gpa, asyvars over(gender) over(college) ytitle("Average overall GPA")
title("GPA of each gender in the" "engineering and business schools")
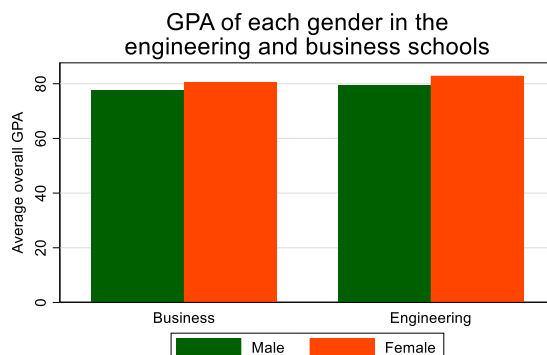*scheme(economist)*

Notice that the look and feel of the graph has completely changed. In our command, we didn't specify anything about colors, fonts, or even the legend. Just by using the scheme **economist**, Stata formatted our graph just like it would appear in the magazine with the same name. We can try out another scheme:
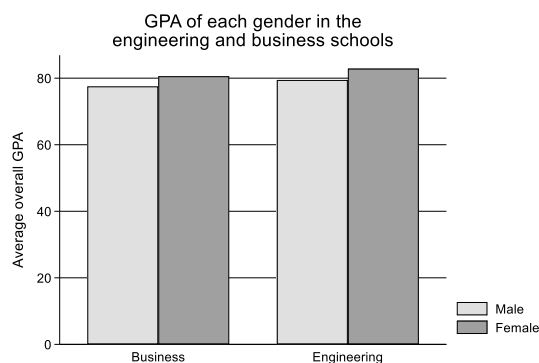
graph bar gpa, asyvars over(gender) over(college) ytitle("Average overall GPA")
title("GPA of each gender in the" "engineering and business schools") scheme(vg_s1c)

GPA of each gender in the
engineering and business schools

Finally, we can use a scheme that doesn't use any colors:

graph bar gpa, asyvars over(gender) over(college) ytitle("Average overall GPA")
title("GPA of each gender in the" "engineering and business schools") scheme(lean2)

GPA of each gender in the
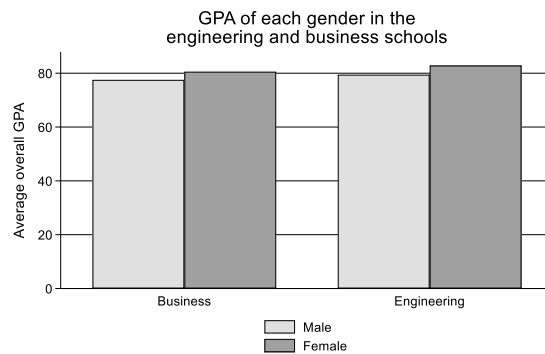engineering and business schools

We don't have to stick to everything that a scheme specifies. We can override as we see fit. For example, what if I don't like the position of the legend? I can tell Stata to place the legend where I want:

graph bar gpa, asyvars over(gender) over(college) ytitle("Average overall GPA")
title("GPA of each gender in the" "engineering and business schools") scheme(lean2)
legend(position(6))

GPA of each gender in the
engineering and business schools

The schemes work the exact same way with box and dot plots:

graph box gpa, asyvar over(gender) over(college) ytitle("Average overall GPA")
title("GPA of each gender in the" "engineering and business schools") scheme(lean2)