

Gergely Daróczy

Minimal example for `Pandoc.brew`

Contents

| | |
|--------------------------|----------|
| Introduction | 1 |
| R objects | 1 |
| Returning plot | 4 |
| Captions | 5 |
| Multiple results | 8 |
| It happens | 8 |

Introduction

We have two meta-information above:

- author
- title

A third field could be there too: date. For details, please check out [Pandoc's homepage](#) or just use `pandoc.title` function of this package.

As you can see writing and formatting paragraphs cannot be easier :)

But what about [R](#)? Let us return pi: *3.142*

R objects

`Pander.brew` would transform any returned R object to Pandoc's markdown in each code block.

For example `mtcars`'s first 5 cases look like:

Table 1: Table continues below

| | mpg | cyl | disp | hp | drat | wt | qsec | vs | am |
|--------------------------|------|-----|------|-----|------|-------|-------|----|----|
| Mazda RX4 | 21.0 | 6 | 160 | 110 | 3.90 | 2.620 | 16.46 | 0 | 1 |
| Mazda RX4 Wag | 21.0 | 6 | 160 | 110 | 3.90 | 2.875 | 17.02 | 0 | 1 |
| Datsun 710 | 22.8 | 4 | 108 | 93 | 3.85 | 2.320 | 18.61 | 1 | 1 |
| Hornet 4 Drive | 21.4 | 6 | 258 | 110 | 3.08 | 3.215 | 19.44 | 1 | 0 |
| Hornet Sportabout | 18.7 | 8 | 360 | 175 | 3.15 | 3.440 | 17.02 | 0 | 0 |

| | gear | carb |
|--------------------------|------|------|
| Mazda RX4 | 4 | 4 |
| Mazda RX4 Wag | 4 | 4 |
| Datsun 710 | 4 | 1 |
| Hornet 4 Drive | 3 | 1 |
| Hornet Sportabout | 3 | 2 |

As you can see some formatting was added to the returned table and was also split up as the original table would have been too wide to fit on the screen (any `pander`er still using a VT100 terminal?) or standard paper. If you do not like that split up, just set the according `panderOption`!

We could try other R objects too, for example let us check `chisq.test` on some variables of `mtcars`:

Table 3: Pearson's Chi-squared test: `mtcars$am` and `mtcars$gear`

| Test statistic | df | P value |
|----------------|----|---------|
| 20.94 | 2 | * * * |

WARNING¹

And we got a warning above!

¹Chi-squared approximation may be incorrect

Returning plot

Plots are automatically grabbed between `brew` tags and some custom formatting applied (if `evalsOptions('graph.unify')` is set to `TRUE`):

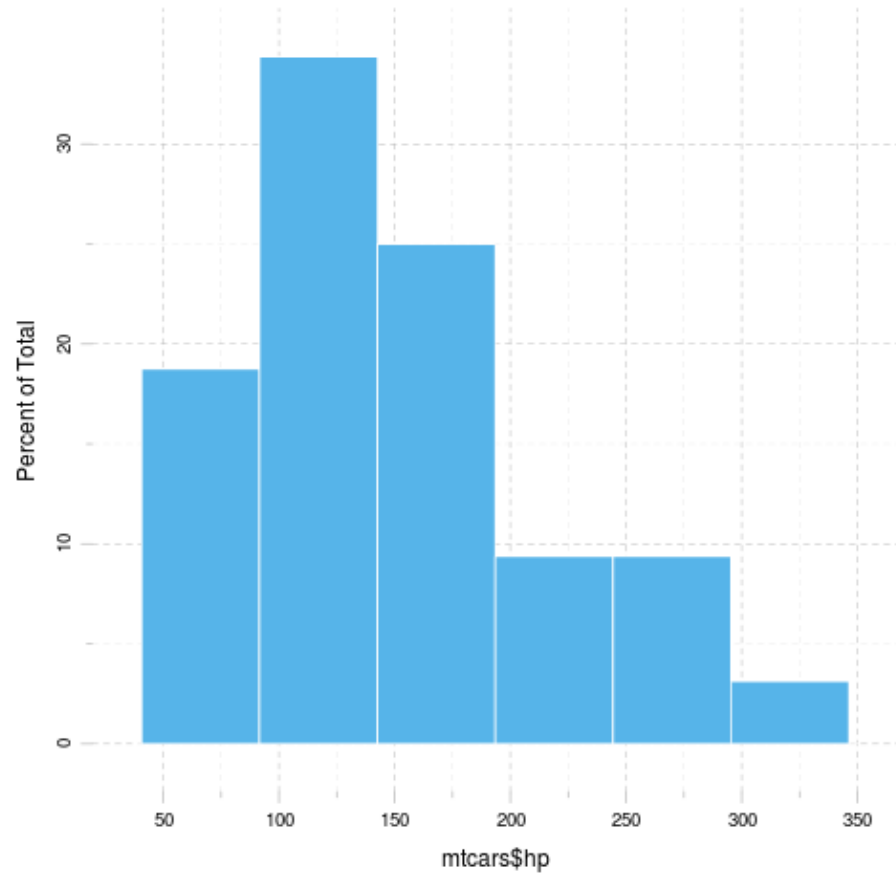
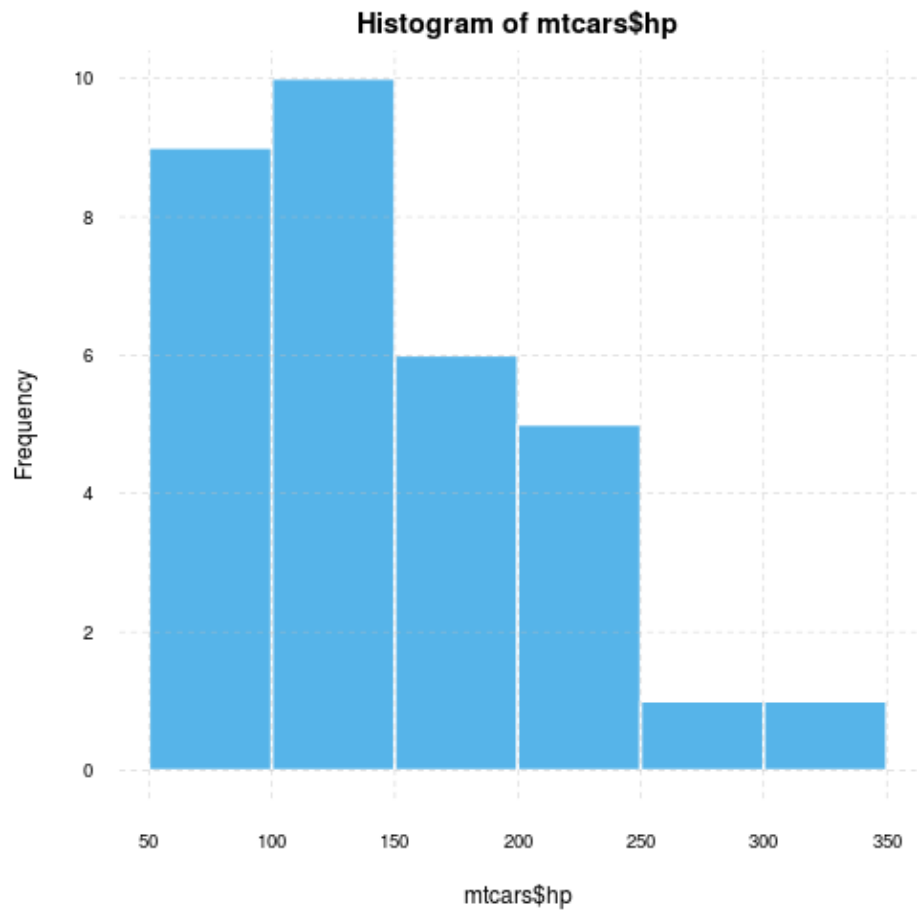


Figure 1:

The above `lattice` looks (IMHO) pretty cool, but what about using `base` plot?



WARNING²

This should be quite similar by my intention :)

What about `ggplot2`?

And adding a caption is easy with even some modified `panderOptions`:

Captions

Just like with tables:

²Applying default formatting to image is somehow compromised (the result could differ from what you specified in `panderOptions`). Hints: printing `lattice/ggplot2` is not needed and tweaking `base` plots with `par` might have some side-effects!

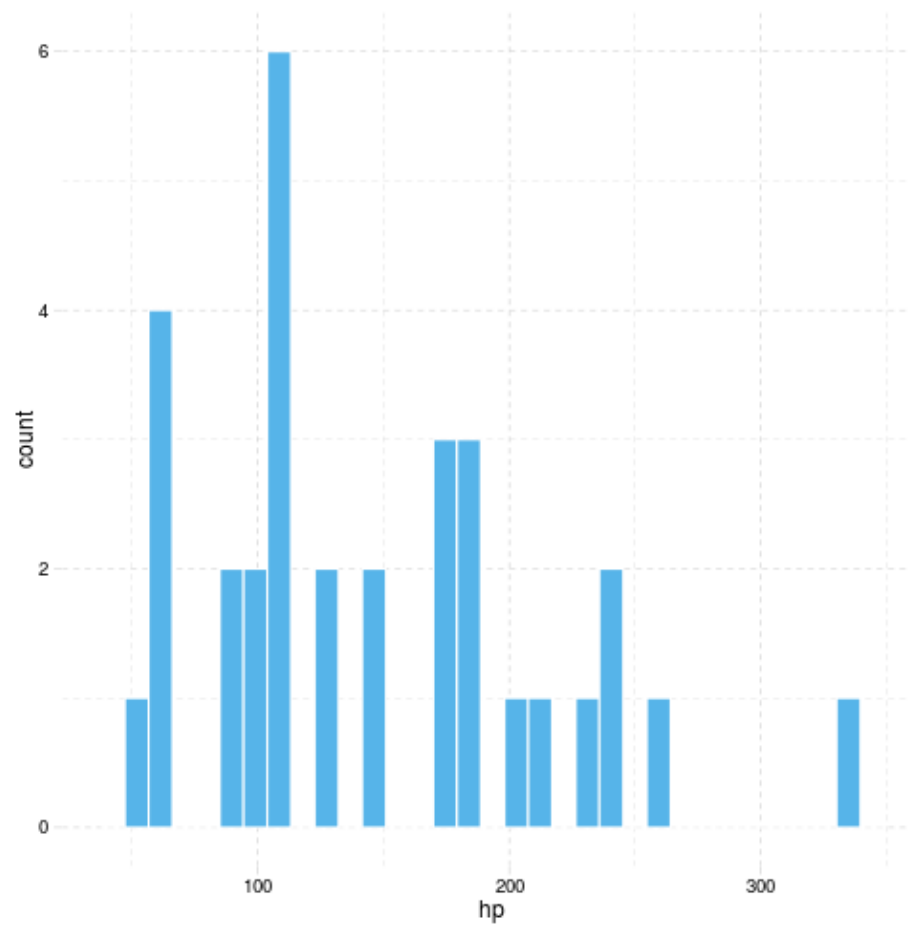


Figure 2:

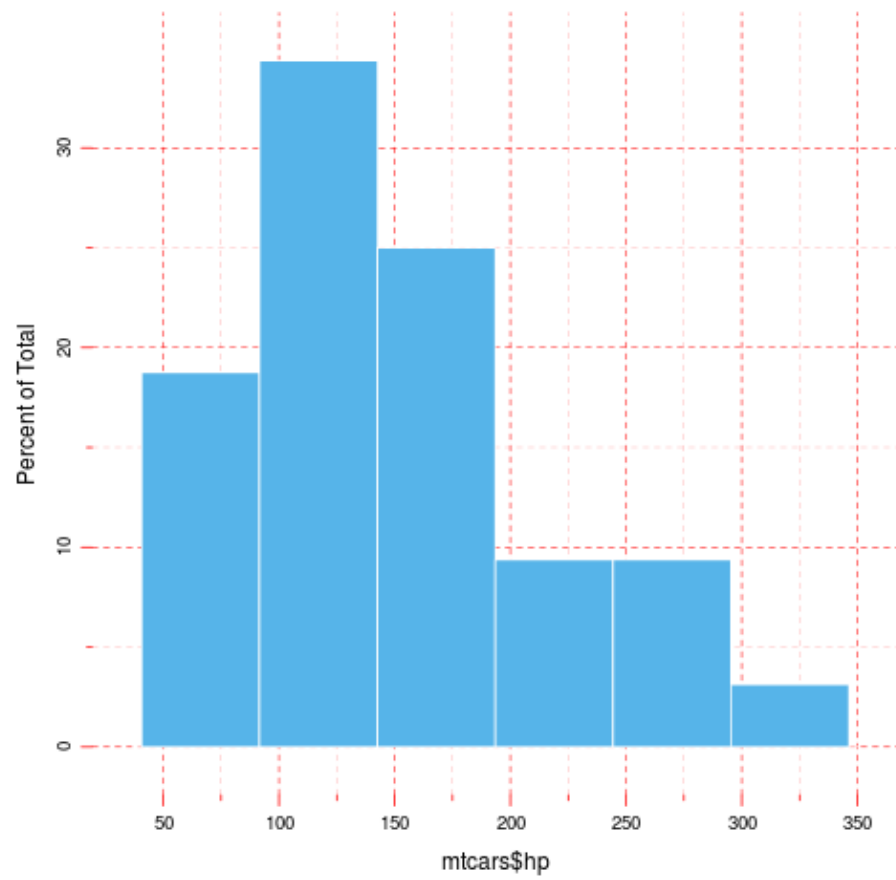


Figure 3: This is a caption, right?

Table 4: Here goes the first two lines of USArrests

| | Murder | Assault | UrbanPop | Rape |
|----------------|--------|---------|----------|------|
| Alabama | 13.2 | 236 | 58 | 21.2 |
| Alaska | 10.0 | 263 | 48 | 44.5 |

Multiple results

And the chunks can result in multiple R objects of course:

- *1, 2, 3, 4 and 5*
- *3.142*
- *110, 110, 93, 110, 175, 105, 245, 62, 95, 123, 123, 180, 180, 180, 205, 215, 230, 66, 52, 65, 97, 150, 150, 245, 175, 66, 91, 113, 264, 175, 335 and 109*

It happens

ERROR³

³object 'unknown.R.object' not found