KNOWING YOUR RS FROM YOUR ELBOW

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Steph Locke | Not my Rs

Star of presentations such as “the LaTeX show”!

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What's this about Rs?

R is an open source language, made out of the ashes of S

It started off stats

Now has excellent graphics, .js, & doc facilities

Why should you know your Rs from your elbow?

Markdown!

Interactive data viz via js libraries

Fully CI/CD capable

Tons of non-web uses

Easier payloads from analytical teams

What does it look like? | Basics

```
#Define a variable
a<-25

#Call a variable
a
```

```
## [1] 25
```

```
#Do something to it
a+1
```

```
## [1] 26
```

What does it look like? | Functions

```
#Define a function
inflateAudienceFigs<-function(x) x*100

#Call a function
inflateAudienceFigs(a)
```

```
## [1] 2500
```

What does it look like? | Extensions

```r
#Get a package
install.packages("commonmark")

#Activate a package
library(commonmark)
```

What does it look like? | OO

```
# Orig OO (s3): cyclismo.org/tutorial/R/s3Classes.html
library(R6)
Loan<-R6Class("Loan",
              public=list(term=NA
                          ,initialize=function(term){
                            if(!missing(term)){
                               self$term<-term
                               }}
                          ,extendBy=function(ext){
                             self$term<-self$term+ext
                             }))
```

What does it look like? | OO

```
acc<-Loan$new(36)
acc$extendBy(6)
acc$term
```

```
## [1] 42
```

What does it look like? | Piping

```
library(magrittr)

#Typical
pairs(iris)

#Pipe
iris %>% pairs
iris %>% tail(.) %>% pairs
iris %>% {tail(.,nrow(.)/5)} %>% pairs
```