

expandChain(output\$plot())

```
# Retrieve a year's worth of daily download data
downloads <- cranlogs::cran_downloads("dplyr",
  from = Sys.Date() - 365, to = Sys.Date())

# Convert daily data to 7 day rolling average
downloads_rolling <- downloads %>%
  mutate(count = zoo::rollapply(count, 7, mean, fill =
"extend"))

ggplot(downloads_rolling, aes(date, count)) +
  geom_line() + ggtitle("Seven day rolling average")
```



As we expand meta-objects, we create a chain of
variable declarations that grows upwards

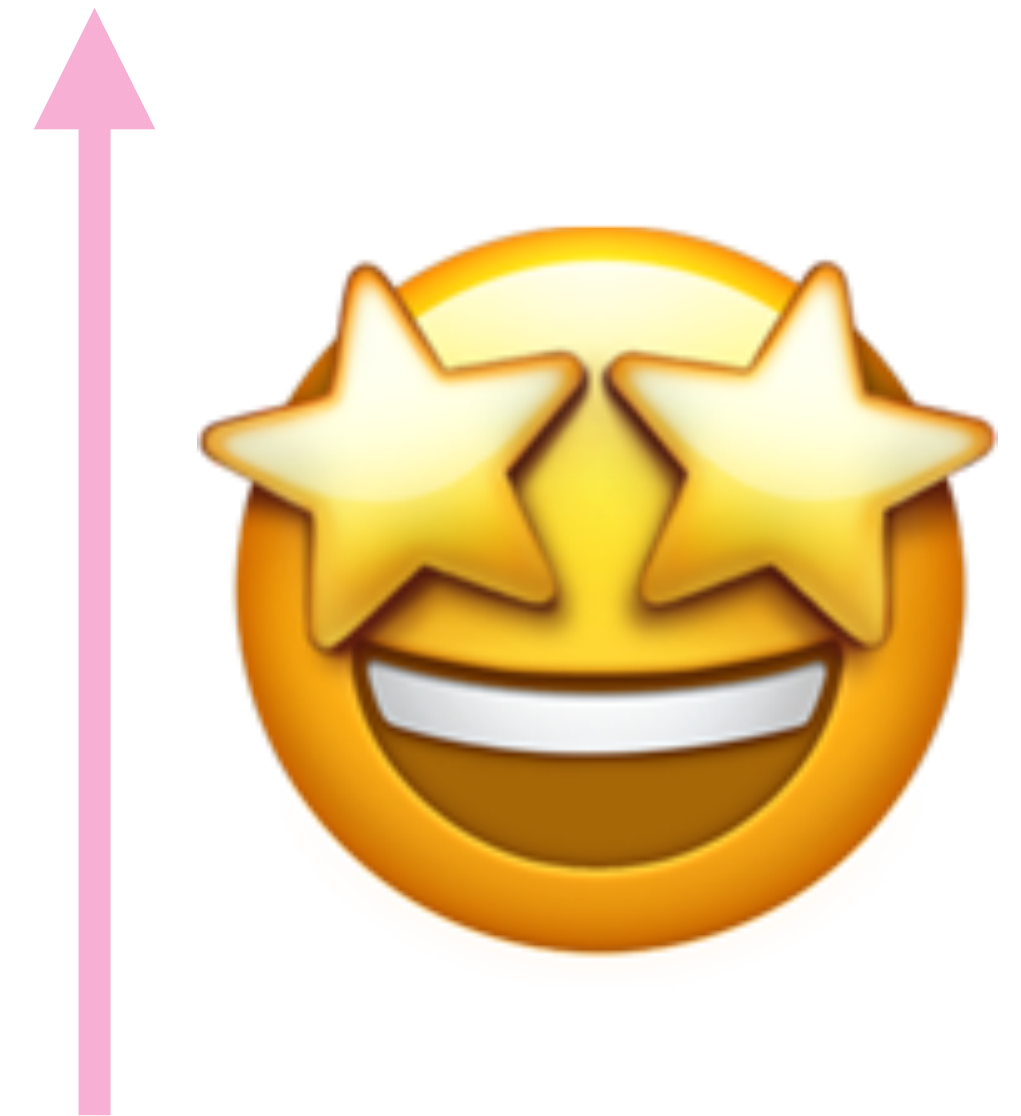


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As we *expand* meta-objects, we create a *chain* of variable declarations that grows upwards

```
withMetaMode(output$plot(), output$summary())
```

```
ggplot({  
  # Convert daily data to 7 day rolling average  
  {  
    # Retrieve a year's worth of daily download data  
    cranlogs::cran_downloads("dplyr", from = Sys.Date() - 365, to =  
Sys.Date())  
  } %>%  
    mutate(count = zoo::rollapply(count, 7, mean, fill = "extend"))  
}, aes(date, count)) +  
  geom_line() +  
  ggtitle("Seven day rolling average")
```

```
summary({  
  # Retrieve a year's worth of daily download data  
  cranlogs::cran_downloads("dplyr", from = Sys.Date() - 365, to =  
Sys.Date())  
}$count)
```