2. De-reference reactive reads using !!

Besides inlining *values*, unquoting has a second essential function: inlining *meta-reactive objects* as code

```
> dataset <- metaReactive({
+   get("package:datasets", !!input$dataset)
+ })

> r2 <- metaReactive({
+   sample_n(!!dataset(), !!input$n)
+ })

> withMetaMode(r2())
sample_n(get("package:datasets", "pressure"), 5)
```

Shinymeta app (…almost)

```r
downloads <- metaReactive2({
  req(input$packages)
  metaExpr(cranlogs::cran_downloads(input$packages,
    from = Sys.Date() - 365, to = Sys.Date())))
})

downloads_rolling <- metaReactive({
  downloads() %>%
    mutate(count = zoo::rollapply(count, 7, mean, fill = "extend"))
})

output$plot <- metaRender(renderPlot, {
  ggplot(downloads_rolling(), aes(date, count)) +
    geom_line() +
    ggtitle("Seven day rolling average")
})
```