

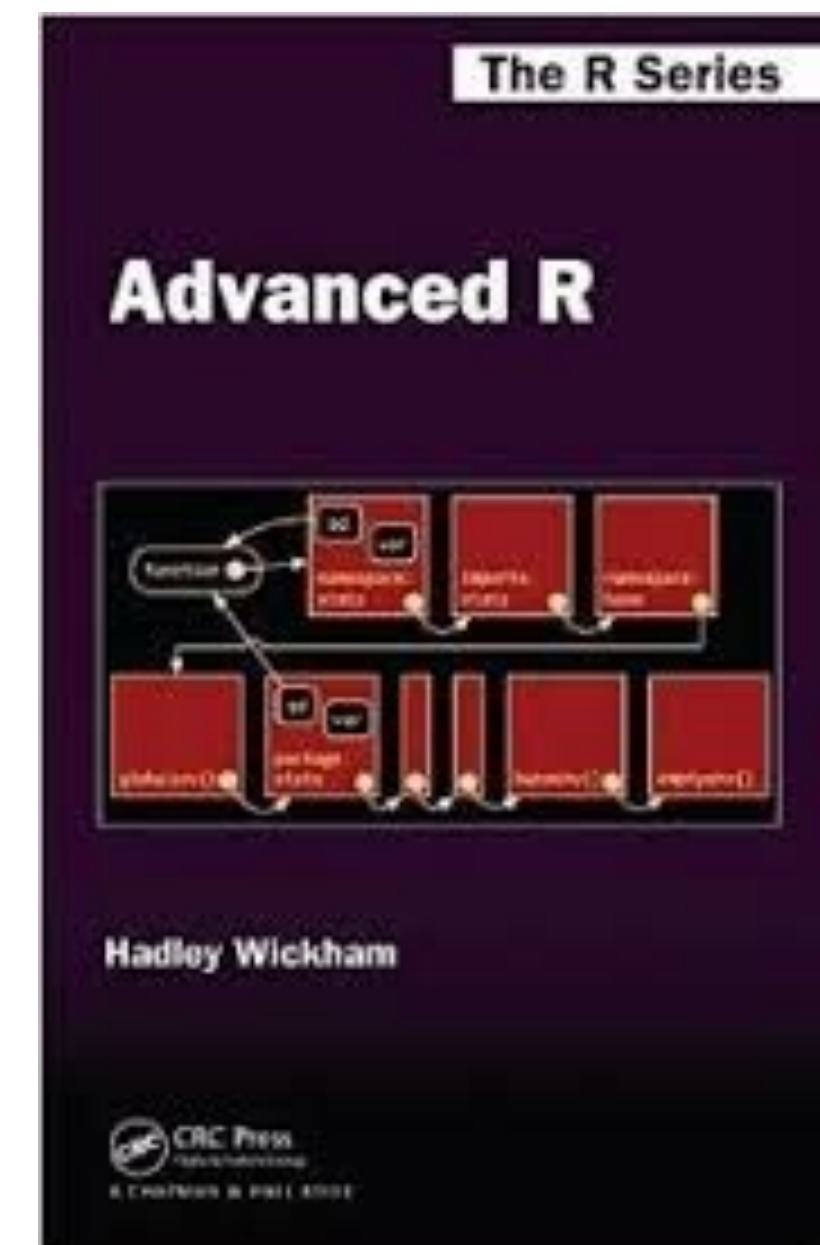
# LEXICAL SCOPING RULES

R functions will first look inside the function to identify all variables being called. If variables do not exist R will look one level up.

```
y <- 2
scoping <- function(x) {
  if(!is.null(y)) {
    return(x * 2 + y)
  }
  x * 2
}
```

```
scoping(4)
[1] 10
```

This is useful when you start to embed functions within functions.



# NAMING CONVENTIONS

Naming your functions is important - be descriptive

- Can you think of a better name than `pv`?

Common naming conventions within arguments include:

- `x`, `y`, `z`: vectors
- `w`: a vector of weights
- `df`: a data frame
- `i`, `j`: numeric indices (typically for rows and columns)
- `n`: length, or number of rows
- `p`: number of columns

***Examining existing R functions will help you understand common practices***