

# Biodiversity dynamics course

## First steps with R Studio

Stephanie Kramer-Schadt



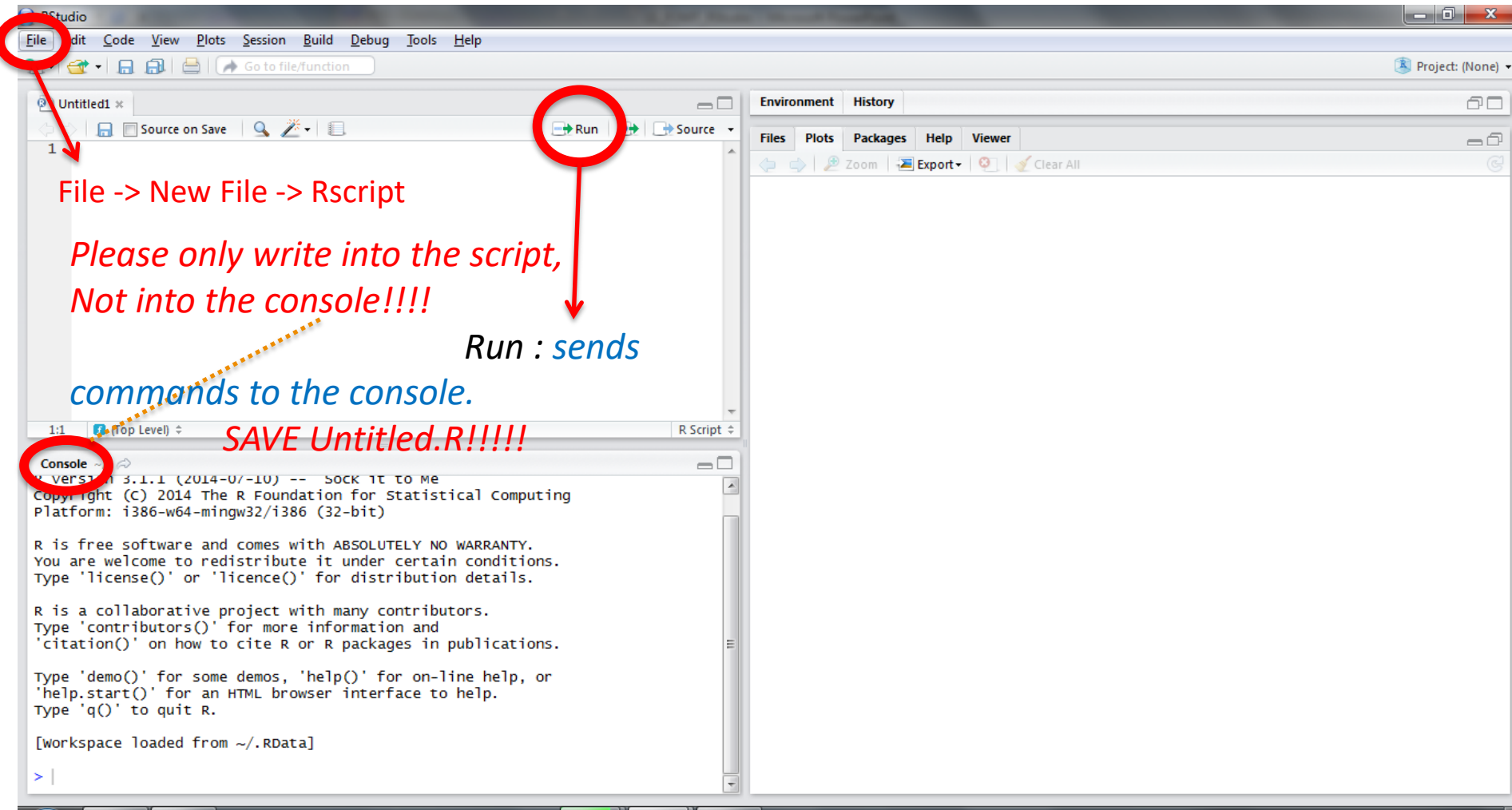
Leibniz Institute for Zoo  
and Wildlife Research

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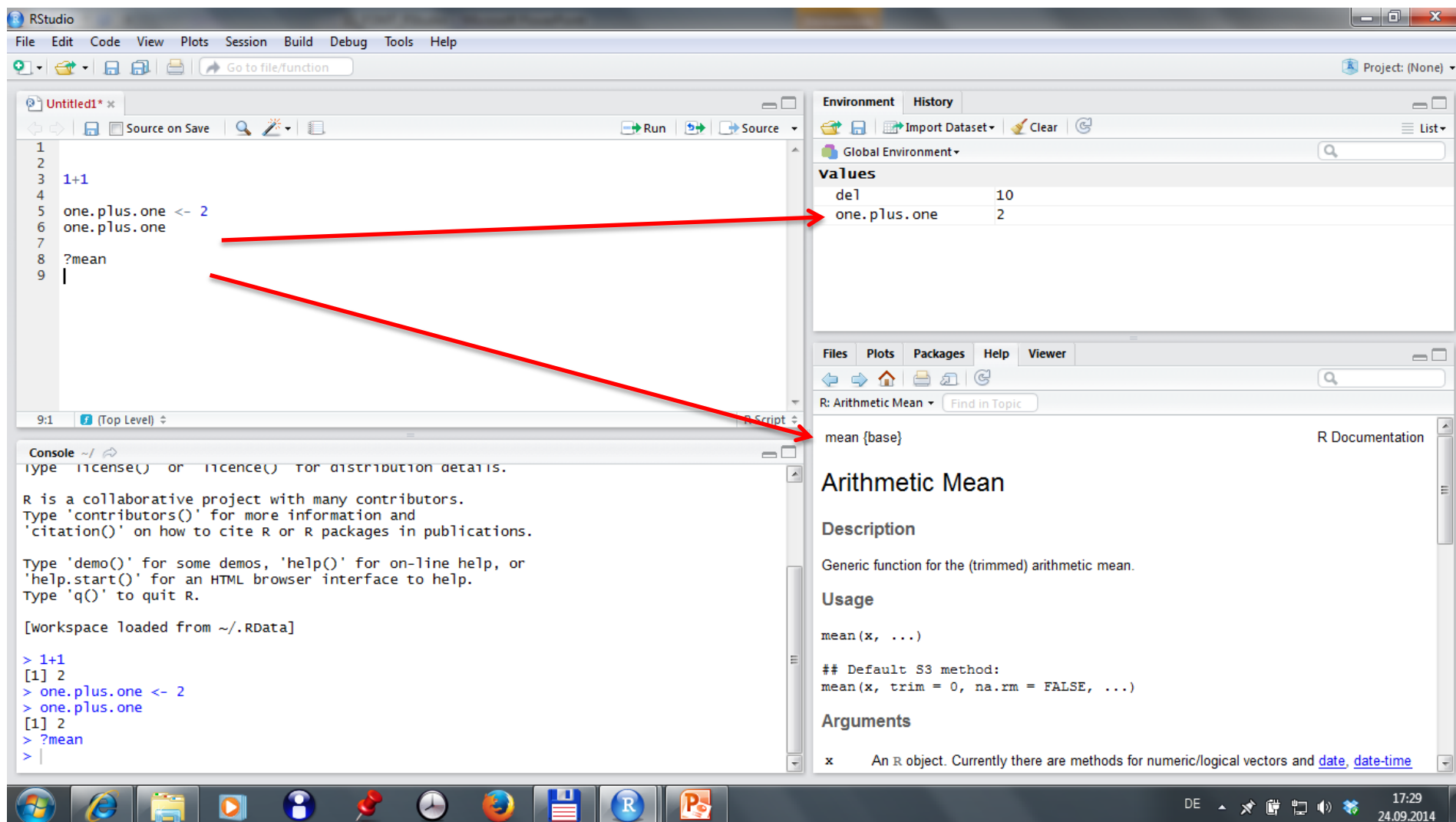
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# R Studio



# Save the file 'Untitled.R' to ,FirstSteps.R'



The screenshot shows the RStudio interface with the following components:

- Source Editor:** Contains the following R code:

```
1  
2  
3 1+1  
4  
5 one.plus.one <- 2  
6 one.plus.one  
7  
8 ?mean  
9 |
```
- Environment:** Shows the Global Environment with the following values:

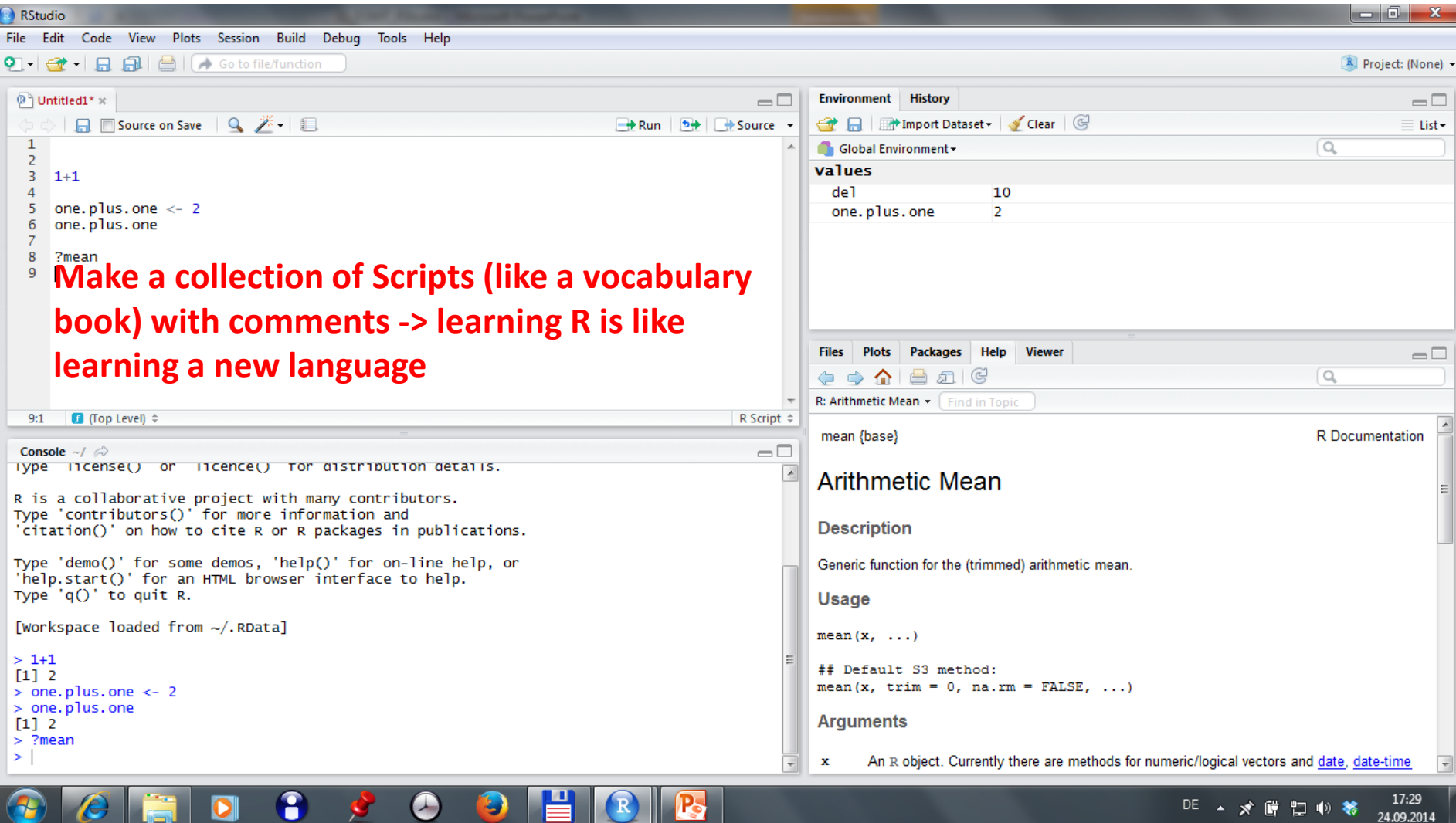
Variable	Value
de1	10
one.plus.one	2
- Console:** Shows the output of the code execution:

```
> 1+1  
[1] 2  
> one.plus.one <- 2  
> one.plus.one  
[1] 2  
> ?mean  
> |
```
- Viewer:** Displays the R documentation for the `mean` function, titled "Arithmetic Mean". It includes a description, usage, and arguments.

Red arrows indicate the flow of data: one arrow points from the `one.plus.one` variable in the Environment pane to the `one.plus.one` variable in the Source Editor, and another arrow points from the `?mean` command in the Source Editor to the `mean` function documentation in the Viewer pane.

# Comment your scripts using #

**Make a collection of Scripts (like a vocabulary book) with comments -> learning R is like learning a new language**



The screenshot displays the RStudio environment with the following components:

- Script Editor (Untitled1\* x):** Contains R code with comments. Line 8 has a comment `?mean` preceding the `mean` function call.
- Console:** Shows the output of the script execution, including the R license text and the results of the calculations: `> 1+1` results in `[1] 2`, `> one.plus.one <- 2` and `> one.plus.one` result in `[1] 2`, and `> ?mean` results in an empty line.
- Environment Pane:** Displays the 'Global Environment' with two variables: `de1` with value 10 and `one.plus.one` with value 2.
- Files Pane:** Shows the 'R: Arithmetic Mean' file selected, with a search bar and a 'Find in Topic' button.
- Viewer Pane:** Displays the 'R Documentation' for the 'Arithmetic Mean' function, including a description and usage examples.

**Console Output:**

```
type 'license()' or 'licence()' for distribution details.

R is a collaborative project with many contributors.
Type 'contributors()' for more information and
'citation()' on how to cite R or R packages in publications.

Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.

[Workspace loaded from ~/.RData]

> 1+1
[1] 2
> one.plus.one <- 2
> one.plus.one
[1] 2
> ?mean
> |
```

**Environment Pane:**

Variable	Value
de1	10
one.plus.one	2

**Viewer Pane (R Documentation):**

## Arithmetic Mean

### Description

Generic function for the (trimmed) arithmetic mean.

### Usage

```
mean(x, ...)
```

## Default S3 method:  

```
mean(x, trim = 0, na.rm = FALSE, ...)
```

### Arguments

**x** An R object. Currently there are methods for numeric/logical vectors and [date](#), [date-time](#)

— If you close...

- Always always a l w a y s **save** your Script!
- **Don't save** the R-workspace image

