

Introduction to R

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What is R? – analogy

Analysis	Experiment
Environment RStudio (text editor)	Environment FlowJo / Diva
Strategy Scripts, Plots and Commands	Strategy Gatings and Plots
Raw Files .R .r .Rmd	Raw Files .fcs

About files

- Files `.R` `.r` `.Rmd` are **simple text files** (TextEdit, Notepad, Emacs...)
- Files `.fcs` `.wsp` are *binary* files (as `.doc` `.xls` etc.)

⇒ you can **always open text** files, not binary ones.

- Text files do not depend on a specific software.
- Binary files are only readable by specific softwares.

⇒ What happens if now you have to pay them ?

Always open-able files means :

- easy to share
- still access in the future^a

a. Try to open a Word document from 1998. But I am reading text files from 1983.

What is R? II

Raw

R is a scripting language

Strategy

A script is a recipe to instruct how to process data

Environment

We write instructions inside an environment

Language = syntax + grammar

Data = how to represents an information

Code is law¹ so **show me the details**² !

1. Lawrence Lessig : <https://framablog.org/2010/05/22/code-is-law-lessig>

2. The devil is in the details.