wrapper_paper

Wrapper Functions Exist

What are wrapper functions

Functions that try to make a complex process easy to run

ggplot wrapper functions (the focus of this paper?)

Advantages to wrappers

Complex analysis and plots can be created in one line by new user

examples of popular wrappers

How they can obscure user choice

plot and function parameters that arn't adjustable

example of wrapper plots that can be difficult to edit (time series comes to mind)

Complex crash messages that arn't clear about their source

Issues with developing wrapper functions

The balance between simplicity for user, and ability to customize.

More options for input can lead to increasing code complexity when trying to account for every combination

Self contained versus non self contained wrapper functions?

Functions that call other functions

Functions that call non-exported functions

Functions that call C code.

Functions that utilize S3 or other methods.

Potential solutions to simplicity & Customization tradeoff

"original" method (Perhaps so simple that I just combine it and the name method which have very little difference)

The simplest default solution I originally developed

Runs into issues if making more than 1 or 2 custom plots

name method

A slight improvement on that in the form of the "name" method

Alows for storing multiple different customized plots since each has seperate binding name

binding method

Can utlize S3 print methods and is more explicit

Doesn't save lists into user global without their knowlege

template method

Uses .R files to store custom made templates for further use

Why i think the template method is the best

Templates can easily be shared between various users or stored between sessions

Easier to further edit an R file after saving as opposed to a list stored in your global

Utilizing these solutionson pre - existing wrappers

Simple method for editing other functions

basic function that can pull code of a function into a new window for editing and saving a new version of that wrapper function

Will run into issues on any non-self contained wrapper function (many of them)

The best implementations will involve the author including these methods of editing themselves

Not sure but If i try to make a roxygen tag it goes here

how wrapper writers could utlize these potential solutions (This might should be done in the previous section as I explain the methods)