

Package ‘fxl’

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Type Package

Title 'fxl' Single Case Design Charting Package

Version 1.7.3

Suggests covr, knitr, rmarkdown, testthat (>= 3.0.0), here, tidyverse, scales, dplyr

VignetteBuilder knitr

Description

The 'fxl' Charting package is used to prepare and design single case design figures that are typically prepared in spreadsheet software. With 'fxl', there is no need to leave the R environment to prepare these works and many of the more unique conventions in single case experimental designs can be performed without the need for physically constructing features of plots (e.g., drawing annotations across plots). Support is provided for various different plotting arrangements (e.g., multiple baseline), annotations (e.g., brackets, arrows), and output formats (e.g., svg, rasters).

License GPL (>= 3)

Encoding UTF-8

LazyData true

Depends R (>= 4.1), rlang

RoxygenNote 7.2.3

Config/testthat/edition 3

NeedsCompilation no

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Contents

assert_input_type 3

Challenge1Data	3
Challenge2Data	4
Challenge4Data	5
cnvrt_coords	5
draw_arrows	6
draw_bar_support	7
draw_brackets	7
draw_cumsum_lines	8
draw_cumsum_points	8
draw_guide_line	9
draw_label_facet	10
draw_label_phase	10
draw_legend	11
draw_lines	11
draw_points	12
draw_rect	12
draw_scr_criterion	13
draw_scr_plines	13
GelinoEtAl2022	14
Gilroyetal2015	15
Gilroyetal2019	15
Gilroyetal2019Tx	16
Gilroyetal2021	17
isValidAestheticMapping	17
isValidAXSCharacter	18
isValidCharacterVector	18
isValidDataFrame	19
isValidLogicalVector	19
isValidNumericVector	20
KoffarnusEtAl2011	20
LozyEtAl2020	21
print.fx1	21
print.fx1semilog	22
scr_anno_arrows	22
scr_anno_brackets	24
scr_anno_guide_line	25
scr_anno_rect	26
scr_bar_support	26
scr_criterion_lines	27
scr_cumsum_lines	28
scr_cumsum_points	29
scr_label_facet	30
scr_label_phase	31
scr_legend	32
scr_lines	33
scr_plines	34
scr_plines_mbd	34
scr_plot	35

assert_input_type 3

scr_points	36
scr_save	37
scr_title	38
scr_xlabel	39
scr_xoverride	40
scr_ylabel	41
scr_yoverride	42
SimulatedAcademicFluency	43
var_map	43

Index 44

<i>assert_input_type</i>	<i>assert_input_type</i>
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Description

assert_input_type

Usage

```
assert_input_type(object, types = character(0), tag = "")
```

Arguments

object	some type of object
types	list of object types acceptable
tag	var to reference in error message

Value

no return value, run for side effects

<i>Challenge1Data</i>	<i>Twitter chart challenge data 1</i>
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Description

Twitter chart challenge data 1

Usage

Challenge1Data

Format

A data frame with 226 rows and 11 variables:

StudyID Extracted study ID

FigureNum Extracted study figure number

PanelNum Extracted study panel number

CaseName Extracted study case name

CaseNum Extracted study number

X Session

OutcomeName Extracted study outcome name

Direction Direction of trend

Y Outcome measure

CondName Extracted study condition

CondNum Extracted study number

Challenge2Data

Twitter chart challenge data 2

Description

Twitter chart challenge data 2

Usage

Challenge2Data

Format

A data frame with 113 rows and 5 variables:

Participant Participant name

Session Session number

Condition Condition name

IWS Incorrect word sequences

CWS Correct word sounds

Challenge4Data	<i>Twitter chart challenge data 4</i>
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Description

Twitter chart challenge data 4

Usage

Challenge4Data

Format

A data frame with 189 rows and 11 variables:

Session Session number

Participant Participant name

Phase Phase name

Number.Writing.Fluency Fluency of number writing

Dot.Number Fluency of dot number skills

Dot.Number.Total Fluency of dot number skills on all sets

Number.Total Number writing fluency on all sets

Number.Writing.Fluency_Accuracy Number writing accuracy

Dot.Number_Accuracy Dot number accuracy

Dot.Number.Total_Accuracy Dot number accuracy on all sets

Number.Total_Accuracy Number writing accuracy on all sets

cnvrt_coords	<i>cnvrt_coords</i>
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Description

Pulled from the TeachingDemos package (GPLv2+ Licensed)

Usage

```
cnvrt_coords(x, y = NULL, input = c("usr", "plt", "fig", "dev", "tdev"))
```

Arguments

x abscissa

y ordinate

input device

Details

Slightly hacked/trimmed

Value

Transformation of coordinates from local plot to figure space for phase changes

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>, Greg Snow <538280@gmail.com>

draw_arrows

draw_arrows

Description

drawing function

Usage

```
draw_arrows(core_frame, current_layer, facet_name)
```

Arguments

core_frame	fxl object
current_layer	layer to be drawn
facet_name	name of facet

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

`draw_bar_support` *draw_bar_support*

Description

Draw bars, but on a secondary axis

Usage

`draw_bar_support(core_frame, current_layer, facet_name, max_y)`

Arguments

`core_frame` fxl object
`current_layer` layer to be drawn
`facet_name` name of facet
`max_y` top of y axis to match

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

`draw_brackets` *draw_brackets*

Description

drawing function

Usage

`draw_brackets(core_frame, current_layer, facet_name)`

Arguments

`core_frame` fxl object
`current_layer` layer to be drawn
`facet_name` name of facet

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

`draw_cumsum_lines` *draw_cumsum_lines*

Description

`draw_cumsum_lines`

Usage

```
draw_cumsum_lines(core_frame, current_layer, facet_name)
```

Arguments

<code>core_frame</code>	fxl object
<code>current_layer</code>	layer to be drawn
<code>facet_name</code>	name of facet

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

`draw_cumsum_points` *draw_cumsum_points*

Description

`draw_cumsum_points`

Usage

```
draw_cumsum_points(core_frame, current_layer, facet_name)
```


Arguments

core_frame	fxl object
current_layer	layer to be drawn
facet_name	name of facet

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

draw_guide_line	<i>draw_guide_line</i>
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Description

draw_guide_line

Usage

draw_guide_line(core_frame, current_layer, facet_name)

Arguments

core_frame	fxl object
current_layer	layer to be drawn
facet_name	name of facet

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

<code>draw_label_facet</code>	<i>draw_label_facet</i>
-------------------------------	-------------------------

Description

drawing function

Usage

```
draw_label_facet(core_frame, current_layer, facet_name)
```

Arguments

<code>core_frame</code>	fxl object
<code>current_layer</code>	layer to be drawn
<code>facet_name</code>	name of facet

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

<code>draw_label_phase</code>	<i>draw_label_phase</i>
-------------------------------	-------------------------

Description

drawing function

Usage

```
draw_label_phase(core_frame, current_layer, facet_name)
```

Arguments

<code>core_frame</code>	fxl object
<code>current_layer</code>	layer to be drawn
<code>facet_name</code>	name of facet

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

`draw_legend` *draw_legend*

Description

drawing function

Usage

`draw_legend(core_frame)`

Arguments

`core_frame` fxl object

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

`draw_lines` *draw_lines*

Description

drawing function

Usage

`draw_lines(core_frame, current_layer, facet_name)`

Arguments

`core_frame` fxl object
`current_layer` layer to be drawn
`facet_name` name of facet

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

draw_points	<i>draw_points</i>
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Description

drawing function

Usage

```
draw_points(core_frame, current_layer, facet_name, zero_axis = FALSE)
```

Arguments

core_frame	fxl object
current_layer	layer to be drawn
facet_name	name of facet
zero_axis	filter out all but zeros

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

draw_rect	<i>draw_rect</i>
-----------	------------------

Description

drawing function

Usage

```
draw_rect(core_frame, current_layer, facet_name, zero_axis = FALSE)
```

Arguments

core_frame	fxl object
current_layer	layer to be drawn
facet_name	name of facet
zero_axis	filter out all but zeros

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

draw_scr_criterion *draw_scr_criterion*

Description

drawing function

Usage

`draw_scr_criterion(core_frame, current_layer, facet_name)`

Arguments

`core_frame` fxl object
`current_layer` layer to be drawn
`facet_name` name of facet

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

draw_scr_plines *draw_scr_plines*

Description

drawing function

Usage

`draw_scr_plines(core_frame, current_layer, facet_name)`

Arguments

core_frame fxl object
current_layer layer to be drawn
facet_name name of facet

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

GelinoEtAl2022

Plotting data from Koffarnus et al. (2011)

Description

Treatment data from Koffarnus et al. (2011)

Usage

GelinoEtAl2022

Format

A data frame with 9 rows and 1 variables:

Condition Baseline vs. policy condition

Time Time of study

SC Slope change dummy code

yhat Predicted value from model

Count1 Count for site 1

Count2 Count for site 2

Count3 Count for site 3

Count4 Count for site 4

Facet Facet/subplot number

Source

<doi:https://doi.org/10.1002/jaba.967>

Gilroyetal2015

Plotting data from Gilroy et al. (2015)

Description

This is data either extracted or included (with permission) to assist with illustrating and replicating the functionality of the package. Specifically, this data is used to illustrate conventions regarding a multiple probe design and how that may be constructed in this package.

Usage

Gilroyetal2015

Format

A data frame with 40 rows and 6 variables:

Participant Participant name

Session Session number

Condition Condition name

Responding Responding rates

PhaseNum Phase number

LineOff Offset for phase line

Source

<doi:https://doi.org/10.1016/j.rasd.2015.04.004>

Gilroyetal2019

Plotting data from Gilroy et al. (2019) - FA

Description

Data from this study (provided with permission) is used to illustrate how findings from a functional analysis can be drawn using the package. Generally, its the same type of functionality required in an alternating treatment design approach.

Usage

Gilroyetal2019

Format

A data frame with 15 rows and 9 variables:

Session Session number

SIB Rates of self-injury

AGG Rates of aggression

DIS Rates of disruptive behavior

Prompt Rates of prompting

Comply Rates of compliance

SR Duration of reinforcement

CTB Rates of combined target behavior

Condition Functional analysis condition

Source

<doi:https://doi.org/10.1080/17518423.2019.1646342>

Gilroyetal2019Tx

Plotting data from Gilroy et al. (2019) - Treatment

Description

This is data either extracted or included (with permission) to assist with illustrating and replicating the functionality of the package. Specifically, this data is used to illustrate conventions regarding combined design elements that include multiple baseline and reversal design elements.

Usage

Gilroyetal2019Tx

Format

A data frame with 86 rows and 8 variables:

Participant Participant name

Session Session number

Condition Functional analysis condition

CTB Rates of combined target behavior

FCR Rates for communication response for function 1

FCR2 Rates for communication response for function 2

PhaseNum Sequenced phase number

LineOff Offset of phase line

Source

<doi:https://doi.org/10.1080/17518423.2019.1646342>

Gilroyetal2021

Plotting data from Gilroy et al. (2015) - Treatment

Description

Treatment data from Gilroy et al. (2021)

Usage

Gilroyetal2021

Format

A data frame with 69 rows and 7 variables:

Participant Participant name

Session Session number

Condition Functional analysis condition

Responding Rates of responding

Reinforcers Reinforcer deliveries

PhaseNum Sequenced phase number

LineOff Offset of phase line

Source

<doi:https://doi.org/10.1002/jaba.826>

isValidAestheticMapping

isValidAestheticMapping

Description

isValidAestheticMapping

Usage

```
isValidAestheticMapping(object = NULL, name = NULL)
```

Arguments

object dataframe (hopefully)

name name for object

Value

no return value, run for side effects

`isValidAXSCharacter` *isValidAXSCharacter*

Description

`isValidAXSCharacter`

Usage

```
isValidAXSCharacter(object = NULL, name = NULL)
```

Arguments

<code>object</code>	some type of object
<code>name</code>	parameter name

Value

no return value, run for side effects

`isValidCharacterVector` *isValidCharacterVector*

Description

`isValidCharacterVector`

Usage

```
isValidCharacterVector(object = NULL, length = -1, name = NULL)
```

Arguments

<code>object</code>	some type of object
<code>length</code>	expected length
<code>name</code>	parameter name

Value

no return value, run for side effects

isValidDataFrame *isValidDataFrame*

Description

isValidDataFrame

Usage

```
isValidDataFrame(object = NULL, name = NULL)
```

Arguments

object	dataframe (hopefully)
name	name for object

Value

no return value, run for side effects

isValidLogicalVector *isValidLogicalVector*

Description

isValidLogicalVector

Usage

```
isValidLogicalVector(object = NULL, length = -1, name = NULL)
```

Arguments

object	some type of object
length	expected length
name	parameter name

Value

no return value, run for side effects

`isValidNumericVector` *isValidNumericVector*

Description

`isValidNumericVector`

Usage

```
isValidNumericVector(object = NULL, length = -1, name = NULL)
```

Arguments

<code>object</code>	some type of object
<code>length</code>	expected length
<code>name</code>	parameter name

Value

no return value, run for side effects

`KoffarnusEtA12011` *Plotting data from Koffarnus et al. (2011)*

Description

Treatment data from Koffarnus et al. (2011)

Usage

```
KoffarnusEtA12011
```

Format

A data frame with 14979 rows and 3 variables:

X Session/day number

ID Participant ID on the Y axis

Code Status for treatment

Source

<doi:https://doi.org/10.1093/alcalc/agr057>

 LozyEtAl2020

Plotting data from Lozy et al. (2020)

Description

Treatment data from Lozy et al. (2020)

Usage

LozyEtAl2020

Format

A data frame with 91 rows and 5 variables:

Session Session number

Participant Participant name

KM Kinesthetic movement choices

TD Traditional drill choices

Phase Sequenced phase number

Source

<doi:<https://doi.org/10.1002/jaba.677>>

 print.fxl

print.fxl

Description

Override the final call to print the fxl object. catches the obj and prints out layers in the sequence laid out by the user

Usage

```
## S3 method for class 'fxl'
print(x, ...)
```

Arguments

x	fxl object
...	inherits from generic

Value

no return, executed for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

```
print.fxlsemitlog      print.fxlsemitlog
```

Description

Override the final call to print the fxl object. catches the obj and prints out layers in the sequence laid out by the user

Usage

```
## S3 method for class 'fxlsemitlog'
print(x, ...)
```

Arguments

x	fxlsemitlog object
...	inherits from generic

Value

no return, executed for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

```
scr_anno_arrows      scr_anno_arrows
```

Description

Add a layer with arrows to direct attention on the plot

Usage

```
scr_anno_arrows(  
  core_frame,  
  arrows = NULL,  
  facet = NULL,  
  color = "black",  
  length = 0.25,  
  angle = 30,  
  code = 2,  
  lwd = 1,  
  lty = 1  
)
```

Arguments

core_frame	fxl class
arrows	list of keyed entries to be drawn on respective facets
facet	the facet which will be drawn upon
color	from base
length	from base
angle	from base
code	from base
lwd	from base
lty	from base

Details

Generally useful for avoiding a legend

Value

a layer to the core plotting object

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

scr_anno_brackets *scr_anno_brackets*

Description

Add a layer with brackets on plot

Usage

```
scr_anno_brackets(  
  core_frame,  
  brackets = NULL,  
  facet = NULL,  
  color = "black",  
  length = 0.25,  
  angle = 30,  
  code = 2,  
  lwd = 1,  
  lty = 1  
)
```

Arguments

core_frame	fxl class
brackets	list of keyed entries to be drawn on respective facets
facet	the facet which will be drawn upon
color	from base
length	from base
angle	from base
code	from base
lwd	from base
lty	from base

Value

a layer to the core plotting object

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

scr_anno_guide_line *scr_anno_guide_line*

Description

This is an annotation illustrating an aim/reduction line

Usage

```
scr_anno_guide_line(  
  core_frame,  
  coords,  
  facet = NA,  
  color = "black",  
  lty = 1,  
  lwd = 1  
)
```

Arguments

core_frame	fxl object
coords	start and finish coords for aim line
facet	panel to draw upon
color	from base
lty	line type
lwd	line width

Value

a layer to the core plotting object

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

scr_anno_rect *scr_anno_rect*

Description

scr_anno_rect

Usage

```
scr_anno_rect(core_frame, rects = NULL, color = "black", fill = "black")
```

Arguments

core_frame	fxl object
rects	list of keyed entries to be drawn on respective facets
color	from base
fill	from base

Value

a layer to the core plotting object

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

scr_bar_support *scr_bar_support*

Description

Adds a supplemental bar to the figure, if relevant to the data

Usage

```
scr_bar_support(  
  core_frame,  
  color = rgb(0.8, 0.8, 0.8, alpha = 0.25),  
  alpha = 1,  
  guide_line = NULL,  
  guide_line_type = 1,  
  guide_line_size = 1,  
  guide_line_color = "black",  
  mapping = NULL,  
  label = "",
```

```

    styler = NA,
    width = 0.8,
    adj = 0.5
  )

```

Arguments

core_frame	fxl object
color	from base
alpha	from base
guide_line	(optional) aim line for bars
guide_line_type	(optional) aim line type for bars
guide_line_size	(optional) aim line size for bars
guide_line_color	(optional) aim line color for bars
mapping	(optional) if overriding draw (i.e., different response)
label	description for bar
styler	a lambda function that returns dynamic styling parameters
width	width of bar
adj	adjustment for y label

Value

a layer to the core plotting object

scr_criterion_lines *scr_criterion_lines*

Description

scr_criterion_lines

Usage

```

scr_criterion_lines(
  core_frame,
  lty = 1,
  color = "black",
  size = 1,
  lines = NULL
)

```

Arguments

<code>core_frame</code>	fxl object
<code>lty</code>	from base
<code>color</code>	from base
<code>size</code>	from base
<code>lines</code>	lines to draw

Value

a layer to the core plotting object

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

<code>scr_cumsum_lines</code>	<i>scr_cumsum</i>
-------------------------------	-------------------

Description

Draw lines, but as a cumulative and rolling sum

Usage

```
scr_cumsum_lines(core_frame, lty = 1, color = "black", size = 1, mapping)
```

Arguments

<code>core_frame</code>	fxl object
<code>lty</code>	from base
<code>color</code>	from base
<code>size</code>	from base
<code>mapping</code>	from base

Value

a layer to the core plotting object

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

scr_cumsum_points	<i>scr_cumsum_points</i>
-------------------	--------------------------

Description

scr_cumsum_points

Usage

```
scr_cumsum_points(  
  core_frame,  
  pch = 21,  
  color = "black",  
  fill = "black",  
  cex = 1,  
  mapping  
)
```

Arguments

core_frame	fxl object
pch	from base
color	from base
fill	from base
cex	from base
mapping	(optional) if overriding draw (i.e., different response)

Value

a layer to the core plotting object

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

scr_label_facet *scr_label_facet*

Description

scr_label_facet

Usage

```
scr_label_facet(  
  core_frame,  
  color = "black",  
  cex = 1,  
  adj = 0.5,  
  face = 1,  
  x = NULL,  
  y = NULL,  
  labels = NULL  
)
```

Arguments

core_frame	fxl object
color	from base
cex	from base
adj	from base
face	like 'font' from base
x	global x position for labels
y	global y position for labels
labels	as stated

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

scr_label_phase	<i>scr_label_phase</i>
-----------------	------------------------

Description

labels to be drawn on plots (typically for phases/conditions, but not necessarily)

Usage

```
scr_label_phase(  
  core_frame,  
  color = "black",  
  cex = 1,  
  adj = 0.5,  
  face = 1,  
  x = NULL,  
  y = NULL,  
  facet = NULL,  
  labels = NULL  
)
```

Arguments

core_frame	fxl object
color	from base
cex	from base
adj	from base
face	like 'font' from base
x	location
y	location
facet	facet of interest
labels	as stated

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

`scr_legend`*scrlegend*

Description

Information for drawing legend onto plots

Usage

```
scr_legend(  
  core_frame,  
  panel = NA,  
  legend,  
  bg = NULL,  
  col = NULL,  
  pt_bg = NULL,  
  lty,  
  pch,  
  box_lty = 0,  
  adj = c(0, 0.5),  
  bty = "n",  
  cex = 1,  
  horiz = FALSE,  
  position = "topright",  
  pt_cex = 1,  
  text_col = "black",  
  border = "black"  
)
```

Arguments

<code>core_frame</code>	fxl object
<code>panel</code>	facet to be drawn on
<code>legend</code>	from base
<code>bg</code>	from base
<code>col</code>	from base
<code>pt_bg</code>	color, for point
<code>lty</code>	from base
<code>pch</code>	from base
<code>box_lty</code>	from base
<code>adj</code>	alignment
<code>bty</code>	from base
<code>cex</code>	from base

horiz	from base
position	from base
pt_cex	from base
text_col	from base
border	border status (from base)

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

scr_lines *scr_lines*

Description

scr_lines

Usage

```
scr_lines(core_frame, lty = 1, color = "black", size = 1, mapping)
```

Arguments

core_frame	fxl object
lty	from base
color	from base
size	from base
mapping	from base

Value

a layer to the core plotting object

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

scr_plines	<i>scr_plines</i>
------------	-------------------

Description

scr_plines

Usage

```
scr_plines(core_frame, lines = NULL, lwd = 1, lty = 1, col = "black")
```

Arguments

core_frame	fxl object
lines	phase lines to be drawn
lwd	from base
lty	from base
col	from base

Value

a layer to the core plotting object

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

scr_plines_mbd	<i>scr_plines_mbd</i>
----------------	-----------------------

Description

scr_plines_mbd

Usage

```
scr_plines_mbd(core_frame, lty = 1, lines = NULL)
```

Arguments

core_frame	fxl object
lty	phase lines types
lines	phase lines to be drawn

Value

a layer to the core plotting object

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

 scr_plot

scrplot

Description

Core object for establishing fxl object and layers

Usage

```
scr_plot(
  data,
  aesthetics = NULL,
  mai = c(0.375, 0.375, 0.25, 0.25),
  omi = c(0.25, 0.25, 0.25, 0.25),
  xaxs = "i",
  yaxs = "i",
  ncol = 1,
  family = "sans",
  bty = "l",
  layout = NA,
  layout_h = NA,
  layout_v = NA,
  semi_color_major_y = "blue",
  semi_color_midpoint_y = "blue",
  semi_color_minor_y = "lightgray",
  semi_color_major_x = "lightgray",
  semilog = FALSE
)
```

Arguments

data	submitted data (not opinionated on naming)
aesthetics	references for data in frame
mai	margins in inches
omi	outer margins in inches
xaxs	x axis formatting, relative to hanging space
yaxs	y axis formatting, relative to hanging space
ncol	number of columns in layout (default = 1)

family	font family
bty	TODO
layout	layout grid
layout_h	layout heights
layout_v	layout widths
semi_color_major_y	colors for semilog lines (major)
semi_color_midpoint_y	colors for semilog lines (center bins)
semi_color_minor_y	colors for semilog lines (minor)
semi_color_major_x	colors for semilog lines (minor)
semilog	determine if this is a semilog type of plot

Value

class of 'fxl' that contains necessary plotting elements

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

scr_points	<i>scr_points</i>
------------	-------------------

Description

scr_points

Usage

```
scr_points(
  core_frame,
  pch = 21,
  color = "black",
  fill = "black",
  cex = 1,
  styler = NA,
  data = NA,
  mapping
)
```

Arguments

core_frame	fxl object
pch	from base
color	from base
fill	from base
cex	from base
styler	a lambda function that returns dynamic styling parameters
data	(optional) if overriding data
mapping	(optional) if overriding draw (i.e., different response)

Value

a layer to the core plotting object

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

scr_save	<i>scrsave</i>
----------	----------------

Description

Function for outputting fxl object at preset size (certain journal are opinionated on size, format, and density)

Usage

```
scr_save(
  core_frame,
  units = "in",
  name = "test.tiff",
  format = "tiff",
  width = 8,
  height = 4,
  res = 600
)
```

Arguments

core_frame	fxl object
units	from base
name	from base
format	type of image to save in
width	from base
height	from base
res	from base

Value

no return, executed for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

scr_title	<i>scrtitle</i>
-----------	-----------------

Description

Override the title

Usage

```
scr_title(core_frame, var, color = "black", cex = 1, adj = 0.5, face = 1)
```

Arguments

core_frame	fxl object
var	string
color	from base
cex	from base
adj	from base
face	like 'font' from base

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

scr_xlabel	<i>xlabel</i>
------------	---------------

Description

Override the x axis label

Usage

```
scr_xlabel(  
  core_frame,  
  var,  
  color = "black",  
  cex = 1,  
  adj = 0.5,  
  face = 1,  
  line = 0  
)
```

Arguments

core_frame	fxl object
var	string
color	from base
cex	from base
adj	from base
face	like 'font' from base
line	line width

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

scr_xoverride *xoverride*

Description

Override the x axis limits

Usage

```
scr_xoverride(  
  core_frame,  
  var,  
  xdelta = 1,  
  xticks = NULL,  
  xdraws = NULL,  
  xrotation = NULL,  
  xtickscecx = 1,  
  xlabeloffset = NULL,  
  xtickslabs = NULL,  
  xticksadj = 1  
)
```

Arguments

core_frame	fxl object
var	string for title
xdelta	skips between ticks (can override)
xticks	specify ticks, vector or named list
xdraws	which x axes to draw
xrotation	degree to rotate positioned labels
xtickscecx	expansion factor for labels
xlabeloffset	offset to push labels downward
xtickslabs	labels for x axis
xticksadj	alignment for custom labels

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

scr_ylabel	<i>ylabel</i>
------------	---------------

Description

Override the y axis label

Usage

```
scr_ylabel(  
  core_frame,  
  var,  
  color = "black",  
  cex = 1,  
  adj = 0.5,  
  face = 1,  
  line = 0  
)
```

Arguments

core_frame	fxl object
var	string
color	from base
cex	from base
adj	from base
face	like 'font' from base
line	line width

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

scr_yoverride	<i>yoverride</i>
---------------	------------------

Description

Override the y axis (or axes) limits

Usage

```
scr_yoverride(  
  core_frame,  
  var,  
  ydelta = 1,  
  yticks = NULL,  
  ytickscex = 1,  
  ydraws = NULL,  
  ytickslabs = NULL  
)
```

Arguments

core_frame	fxl object
var	from base
ydelta	skips between ticks (can override)
yticks	tick values (numerical)
ytickscex	expansion factor for labels
ydraws	specify axes manual
ytickslabs	tick labels

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

SimulatedAcademicFluency

Plotting data for Hypothetical Academic MTSS

Description

Plotting data for Hypothetical Academic MTSS

Usage

SimulatedAcademicFluency

Format

A data frame with 168 rows and 7 variables:

Rates Rates of change

Times Multiplier for model level

index Individual id

starts Modeled baseline start

jitter Jitter offset

pred Prediction from model

err Residual error

var_map

var_map

Description

This helper function maps out relationships to be parsed later on

Usage

var_map(...)

Arguments

... map expressed relationships out

Value

list of exprs to map variables to plotting methods

Index

* datasets

- Challenge1Data, 3
 - Challenge2Data, 4
 - Challenge4Data, 5
 - GelinoEtAl2022, 14
 - Gilroyetal2015, 15
 - Gilroyetal2019, 15
 - Gilroyetal2019Tx, 16
 - Gilroyetal2021, 17
 - KoffarnusEtAl2011, 20
 - LozyEtAl2020, 21
 - SimulatedAcademicFluency, 43
- assert_input_type, 3
- Challenge1Data, 3
- Challenge2Data, 4
- Challenge4Data, 5
- cnvrt_coords, 5
- draw_arrows, 6
- draw_bar_support, 7
- draw_brackets, 7
- draw_cumsum_lines, 8
- draw_cumsum_points, 8
- draw_guide_line, 9
- draw_label_facet, 10
- draw_label_phase, 10
- draw_legend, 11
- draw_lines, 11
- draw_points, 12
- draw_rect, 12
- draw_scr_criterion, 13
- draw_scr_plines, 13
- GelinoEtAl2022, 14
- Gilroyetal2015, 15
- Gilroyetal2019, 15
- Gilroyetal2019Tx, 16
- Gilroyetal2021, 17
- isValidAestheticMapping, 17
- isValidAXSCharacter, 18
- isValidCharacterVector, 18
- isValidDataFrame, 19
- isValidLogicalVector, 19
- isValidNumericVector, 20
- KoffarnusEtAl2011, 20
- LozyEtAl2020, 21
- print.fx1, 21
- print.fx1semilog, 22
- scr_anno_arrows, 22
- scr_anno_brackets, 24
- scr_anno_guide_line, 25
- scr_anno_rect, 26
- scr_bar_support, 26
- scr_criterion_lines, 27
- scr_cumsum_lines, 28
- scr_cumsum_points, 29
- scr_label_facet, 30
- scr_label_phase, 31
- scr_legend, 32
- scr_lines, 33
- scr_plines, 34
- scr_plines_mbd, 34
- scr_plot, 35
- scr_points, 36
- scr_save, 37
- scr_title, 38
- scr_xlabel, 39
- scr_xoverride, 40
- scr_ylabel, 41
- scr_yoverride, 42
- SimulatedAcademicFluency, 43
- var_map, 43