

# Package: starfish (via r-universe)

November 19, 2024

**Title** Internal helpers

**Version** 0.0.8.9001

**Description** Floating deep down in the sea starfish lives healthy and happily.

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**Encoding** UTF-8

**Roxygen** list(markdown = TRUE)

**RoxygenNote** 7.3.1

**URL** <https://github.com/cathblatter/starfish>,  
<https://cathblatter.github.io/starfish/>

**BugReports** <https://github.com/cathblatter/starfish/issues>

**Imports** ggplot2, methods, dplyr, tibble, lubridate

**Depends** R (>= 2.10)

**LazyData** true

**Suggests** testthat (>= 3.0.0)

**Config/testthat/edition** 3

**Repository** <https://cathblatter.r-universe.dev>

**RemoteUrl** <https://github.com/cathblatter/starfish>

**RemoteRef** HEAD

**RemoteSha** 1f014cb0dcd9e61d3c6c1a682d5ab9b9cf689eab

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create_table	<i>Reverse engineer a table from its description from a SQL query</i>
--------------	---

---

## Description

Reverse engineer a table from its description from a SQL query

## Usage

```
create_table(tbl_name)
```

## Arguments

tbl_name	Table with holds the value with both the TABLE_NAME as well as the COLUMN_NAME. See details and examples
----------	--

## Details

The table to create derives its name from the TABLE\_NAME column and the columns from the COLUMN\_NAME column. Overall, the output comes from an Oracle DB

## Value

a tibble assigned to the GlobalEnv

## Examples

```
# mockup table description
(tbl_descr <- tibble::tibble(TABLE_NAME = c("my_table"),
                           COLUMN_NAME = c("var1", "var2", "var3")))

# now print the table
## Not run: create_table(tbl_descr)
```

---

dict_hierarchie	<i>dict_hierarchie</i>
-----------------	------------------------

---

**Description**

dict\_tbl about pep\_hierarchie dataset

**Usage**

dict\_hierarchie

**Format**

An object of class tbl\_df (inherits from tbl, data.frame) with 27 rows and 3 columns.

---

dict_pepzeiten	<i>dict_pepzeiten</i>
----------------	-----------------------

---

**Description**

dict\_tbl about pep\_zeiten dataset

**Usage**

dict\_pepzeiten

**Format**

An object of class tbl\_df (inherits from tbl, data.frame) with 32 rows and 6 columns.

---

facet_custom	<i>STARFISH customized facets with units on right side</i>
--------------	--

---

**Description**

STARFISH customized facets with units on right side

**Usage**

```
facet_wrap_starfish(  
  facets = ~anon_unit,  
  ncol = 1,  
  nrow = NULL,  
  strip.position = "right",  
  drop = TRUE,  
  scales = "fixed",  
  shrink = TRUE,  
  labeller = "label_value",  
  as.table = TRUE,  
  switch = NULL,  
  dir = "h",  
  ...  
)
```

```
facet_wrap_sf(  
  facets = ~anon_unit,  
  ncol = 1,  
  nrow = NULL,  
  strip.position = "right",  
  drop = TRUE,  
  scales = "fixed",  
  shrink = TRUE,  
  labeller = "label_value",  
  as.table = TRUE,  
  switch = NULL,  
  dir = "h",  
  ...  
)
```

**Arguments**

facets	defaults to variable anon_unit
ncol	defaults to 1
nrow	defaults to NULL
strip.position	"right"
drop	default: TRUE
scales	default: fixed
shrink	default fixed
labeller	"label_value"
as.table	TRUE
switch	NULL
dir	"h"
...	to pass to ggplot2::facet_wrap

**Value**

a facet

---

filter\_shifts\_where *Filter all shifts where a certain condition is met*

---

**Description**

Filter all shifts where a certain condition is met

**Usage**

```
filter_shifts_where(.data, ..., shift_var = shift_id)
```

**Arguments**

.data	a data frame or tibble
...	condition to pass to dplyr::filter
shift_var	variable with the shift_identified, default = "shift_id"

**Value**

a dataframe containing all shift-entries where a condition is met

---

geom\_covid\_starfish *Highlighting Covid timeframe in NH*

---

**Description**

Highlighting Covid timeframe in NH

**Usage**

```
geom_covid_starfish(  
  date1 = "2020-03-17",  
  date2 = "2021-12-01",  
  color = "grey30",  
  linetype = "dashed",  
  alpha = 0.6  
)
```

**Arguments**

date1	default set
date2	default set
color	default set
linetype	default set
alpha	default set

**Value**

a custom geom

---

get\_starfish\_palettes *Get names of all unique palettes provided in starfish*

---

**Description**

Get names of all unique palettes provided in starfish

**Usage**

```
get_starfish_palettes(full = FALSE)
```

**Arguments**

full	Whether to include full palette names (with suffixes, e.g. <code>_cont</code> ) or just stubs
------	---

**Value**

Vector of palette name stubs or full names

**Examples**

```
get_starfish_palettes()
```

---

scale_custom	<i>Custom color and fill scales</i>
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---

**Description**

Custom coloring and filling functions based on unique color palettes

**Usage**

```
scale_color_starfish_d(palette = "starfish", extend = FALSE, ...)
```

```
scale_colour_starfish_d(palette = "starfish", extend = FALSE, ...)
```

```
scale_fill_starfish_d(palette = "starfish", extend = FALSE, ...)
```

```
scale_color_starfish_op(  
  palette = "starfish",  
  val_names = c("good", "neutral", "bad"),  
  ...  
)
```

```
scale_colour_starfish_op(  
  palette = "starfish",  
  val_names = c("good", "neutral", "bad"),  
  ...  
)
```

```
scale_fill_starfish_op(  
  palette = "starfish",  
  val_names = c("good", "neutral", "bad"),  
  ...  
)
```

```
scale_color_starfish_div(palette = "starfish", ...)
```

```
scale_colour_starfish_div(palette = "starfish", ...)
```

```
scale_fill_starfish_div(palette = "starfish", ...)
```

```
scale_color_starfish_c(palette = "starfish", ...)
```

```
scale_colour_starfish_c(palette = "starfish", ...)
```

```
scale_fill_starfish_c(palette = "starfish", ...)
```

**Arguments**

palette	Name of color palette
---------	-----------------------

extend	Whether to extend discrete color palette to make sufficient colors for levels needed
...	Additional arguments to be passed to internal scale function
val_names	For opinionated scales, defaults to "good", "neutral", "bad"

## Details

Specific functions include:

- `scale_(color/colour/fill)_starfish_d`: Discrete palette with either fixed or dynamically extended number of shades
- `scale_(color/colour/fill)_starfish_op\b`: Discrete palette with fixed colors for "good", "bad", and "neutral"
- `scale_(color/colour/fill)_starfish_div`: Continuous diverging color palette, must contain negative, neutral, positive values
- `scale_(color/colour/fill)_starfish_c`: Continuous color palette

## Examples

```
library(ggplot2)
library(starfish)
ggplot(diamonds[1:2000,], aes(x = cut, y = carat,
color = cut)) +
  geom_point() +
  scale_color_starfish_d() +
  theme_starfish()
```

---

scale\_x\_date\_starfish *Custom starfish date scale*

---

## Description

Custom starfish date scale

## Usage

```
scale_x_date_starfish(
  date_breaks = "1 year",
  date_labels = "%Y",
  expand = c(0.05, 0),
  ...
)

scale_x_date_sf(
  date_breaks = "1 year",
  date_labels = "%Y",
  expand = c(0.05, 0),
  ...
)
```



### Arguments

date_breaks	defaults to 1 year
date_labels	defaults to YYYY
expand	how to expand the axes
...	further args passed

### Value

a custom scale

---

starfish_pal	<i>STARFISH palette with six dimensions</i>
--------------	---

---

### Description

STARFISH palette with six dimensions

### Usage

```
starfish_pal  
starfish_pal_op  
starfish_pal_cont  
starfish_pal_div
```

### Format

- An object of class character of length 17.
- An object of class character of length 3.
- An object of class character of length 2.
- An object of class character of length 3.

---

tbl_study_period	<i>tbl_study_period</i>
------------------	-------------------------

---

**Description**

a table containing all days of the study period

- as dates
- as integer representation
- days in month
- weekdays
- months
- weekends

**Usage**

```
tbl_study_period
```

**Format**

An object of class `data.frame` with 1826 rows and 5 columns.

---

theme_starfish	<i>STARFISH ggplot theme</i>
----------------	------------------------------

---

**Description**

[ggplot2](#) plot theme based on...

**Usage**

```
theme_starfish(base_theme = ggplot2::theme_minimal(), ...)
```

**Arguments**

base_theme	A base theme upon which additional theme-specific options are applied
...	Frurther arguments passed to <code>ggplot2::theme()</code>

**References**

[https://github.com/gadenbuie/ggpomological/blob/master/R/theme\\_pomological.R](https://github.com/gadenbuie/ggpomological/blob/master/R/theme_pomological.R)

**See Also**

[ggplot2::theme](#)

**Examples**

```
## Not run:  
library(ggplot2)  
data <- data.frame(x = 1:10, y = 1:10)  
ggplot(data, aes(x, y)) + geom_point() + theme_starfish()  
  
## End(Not run)
```

---

wd\_data\_rd

*Internal directories*

---

**Description**

paths to the project directory - data folder

**Usage**

wd\_data\_rd

**Format**

An object of class character of length 1.

---

wd\_deidata\_rd

*Internal directories*

---

**Description**

paths to the project directory - de-id'd data folder

**Usage**

wd\_deidata\_rd

**Format**

An object of class character of length 1.

---

wd\_prepdata\_rd      *Internal directories*

---

**Description**

paths to the project directory - prepared data folder

**Usage**

wd\_prepdata\_rd

**Format**

An object of class character of length 1.

---

wd\_rd      *Internal directories*

---

**Description**

paths to the project directory

**Usage**

wd\_rd

**Format**

An object of class character of length 1.

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