Weryfikacja reprodukowywalności

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ggplot2 Compatible Quantile-QuantilePlots in R

Figure 1

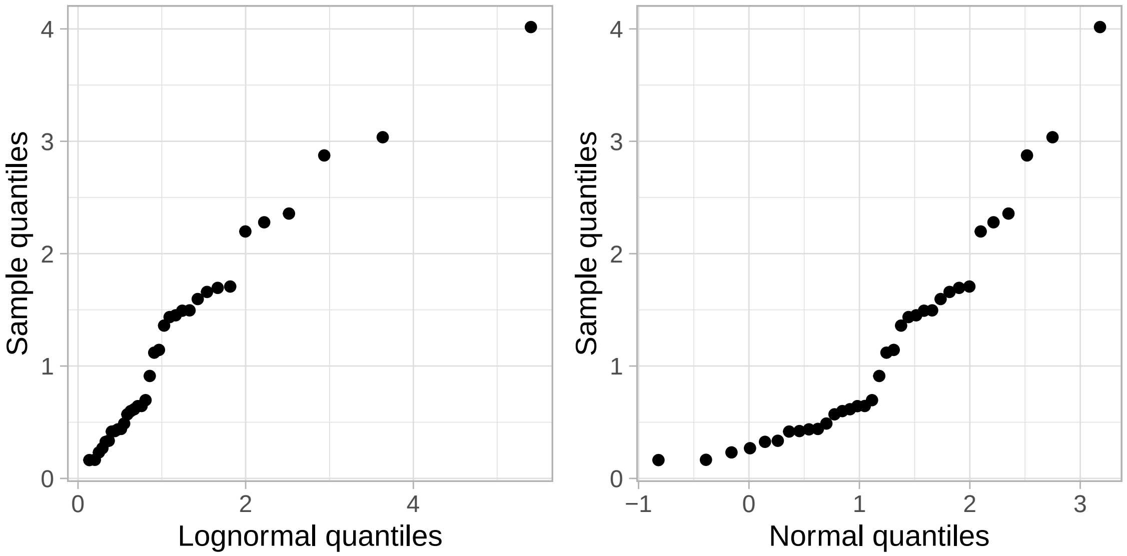


Figure 2

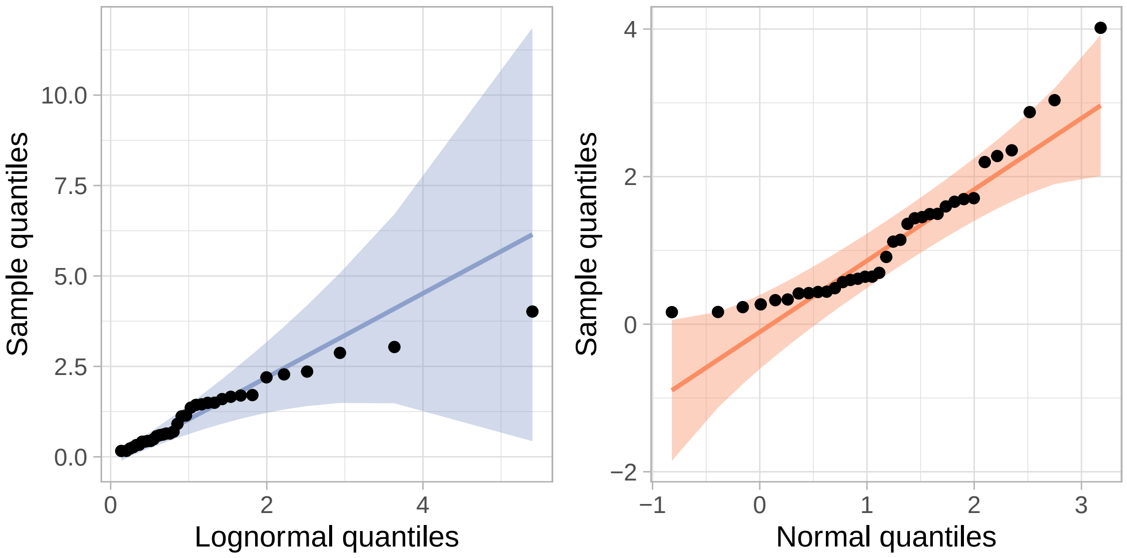


Figure 3

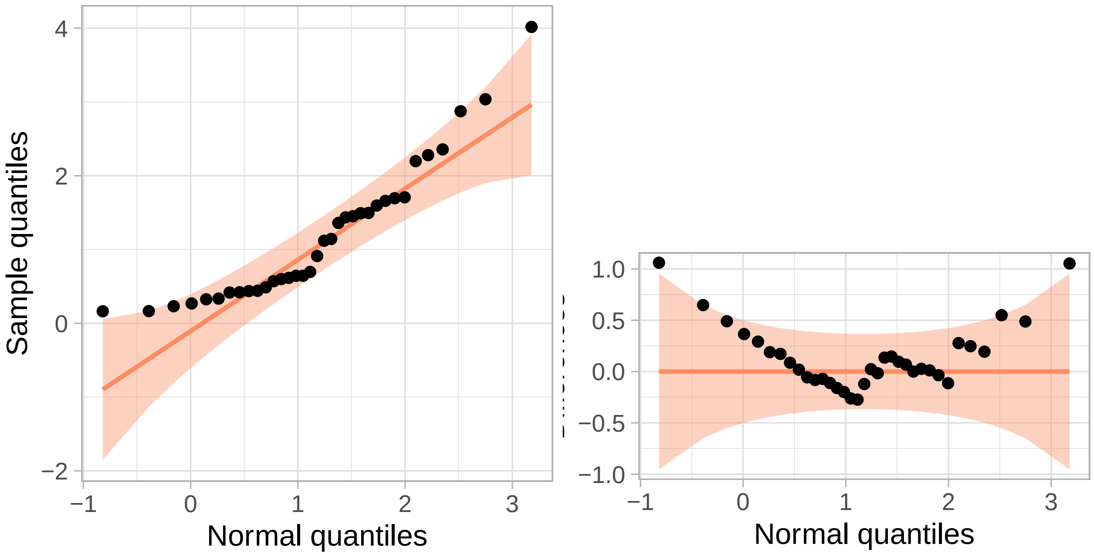

Sample quantiles
4
2
0
−2
−1
0
1
2
3
Normal quantiles
1.0
0.5
0.0
−0.5
−1.0
−1
0
1
2
3
Normal quantiles

Figure 4

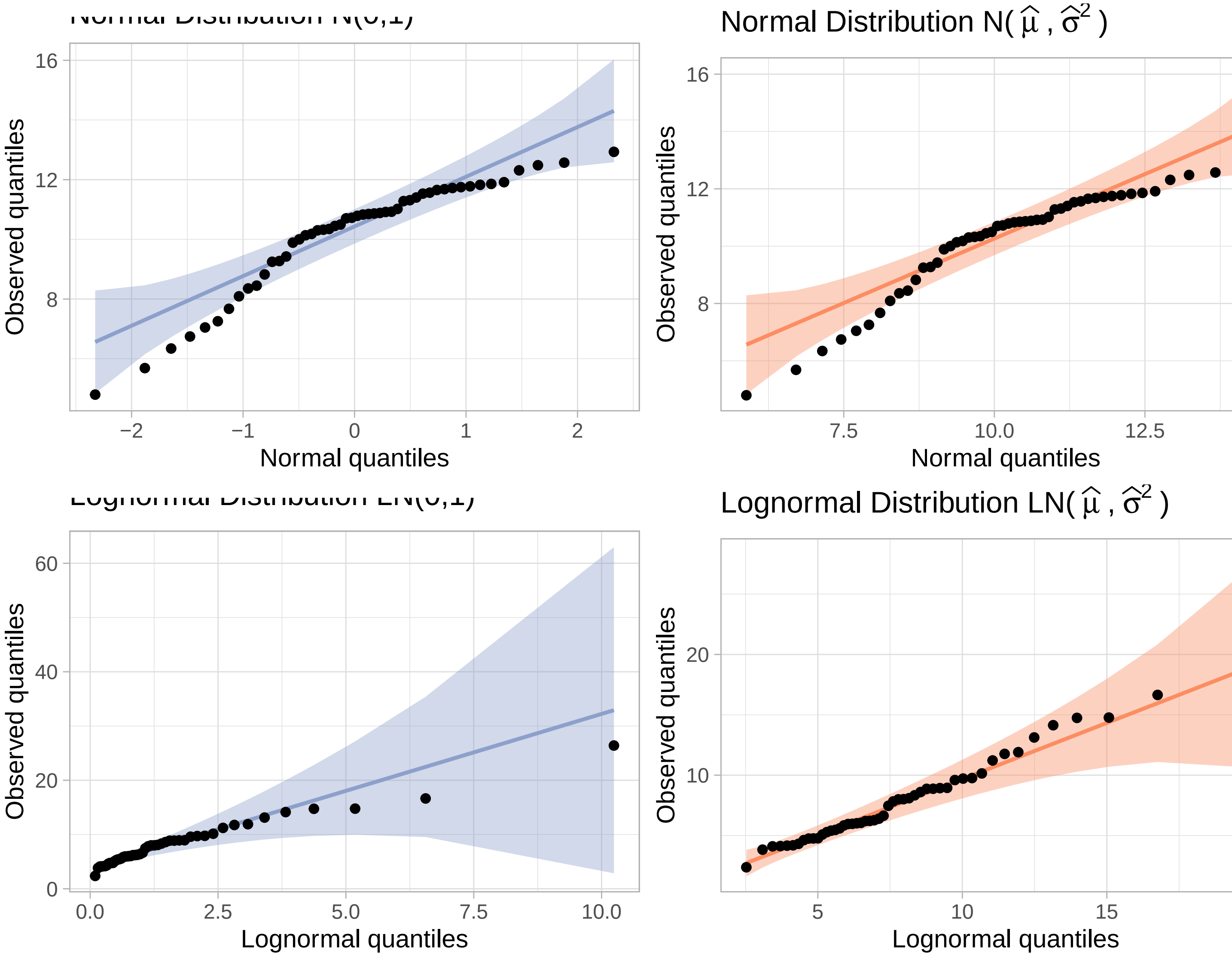

Normal Distribution N(0,1)
16
12
8
Observed quantiles
−2
−1
0
1
2
Normal quantiles
Normal Distribution N($\widehat{\mu}$, $\widehat{\sigma}^2$)
16
12
8
Observed quantiles
7.5
10.0
12.5
Normal quantiles
Lognormal Distribution LN(0,1)
60
40
20
0
Observed quantiles
0.0
2.5
5.0
7.5
10.0
Lognormal quantiles
Lognormal Distribution LN($\widehat{\mu}$, $\widehat{\sigma}^2$)
20
10
Observed quantiles
5
10
15
Lognormal quantiles

Figure 5

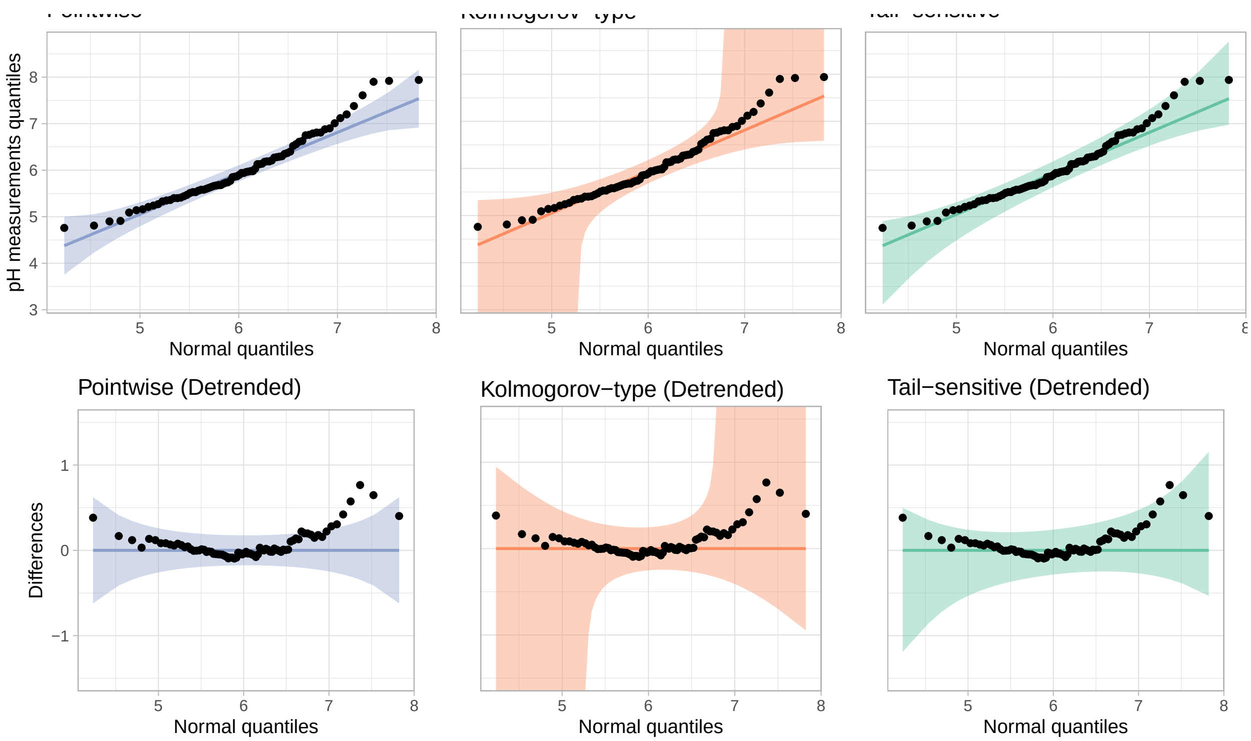


Figure 6

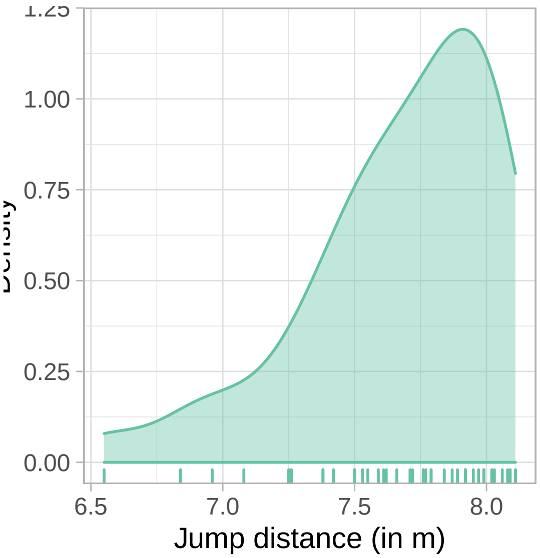


Figure 7

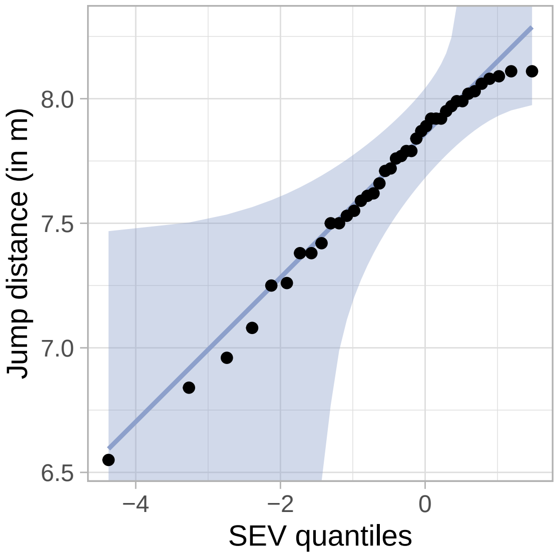


Figure 8

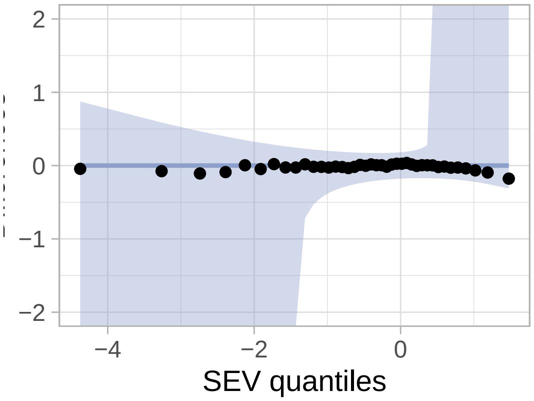


Figure 9

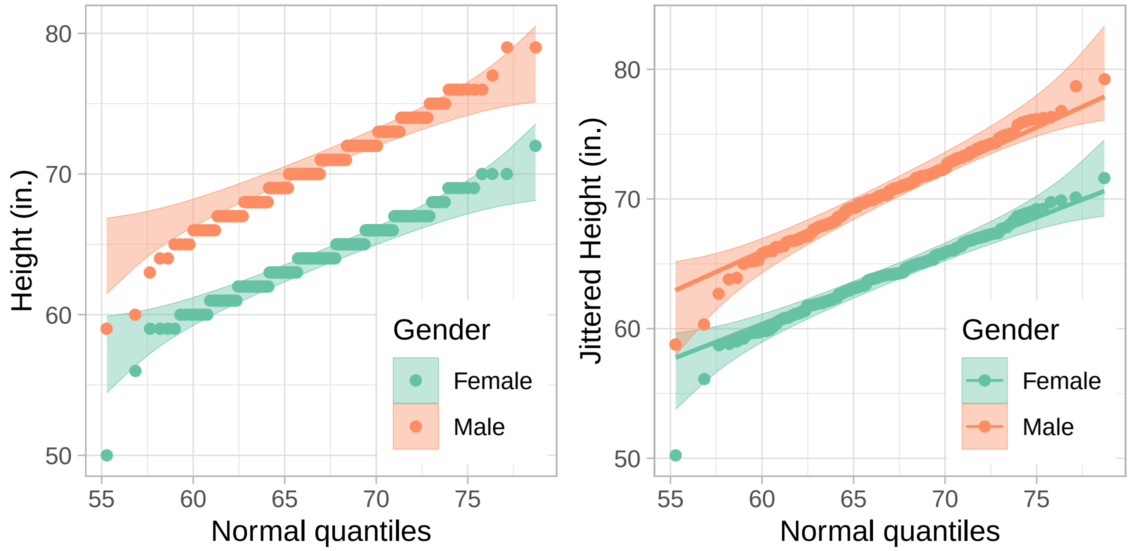


Table 1

SEX	mean height (in)	sd (in)	mean log weight (kg)	sd (kg)
Male	70.55043	2.966460	9.100936	0.2011216
Female	64.50972	2.911454	8.887950	0.2254663
Total	66.99109	4.176295	8.978768	0.2397852

Figure 10

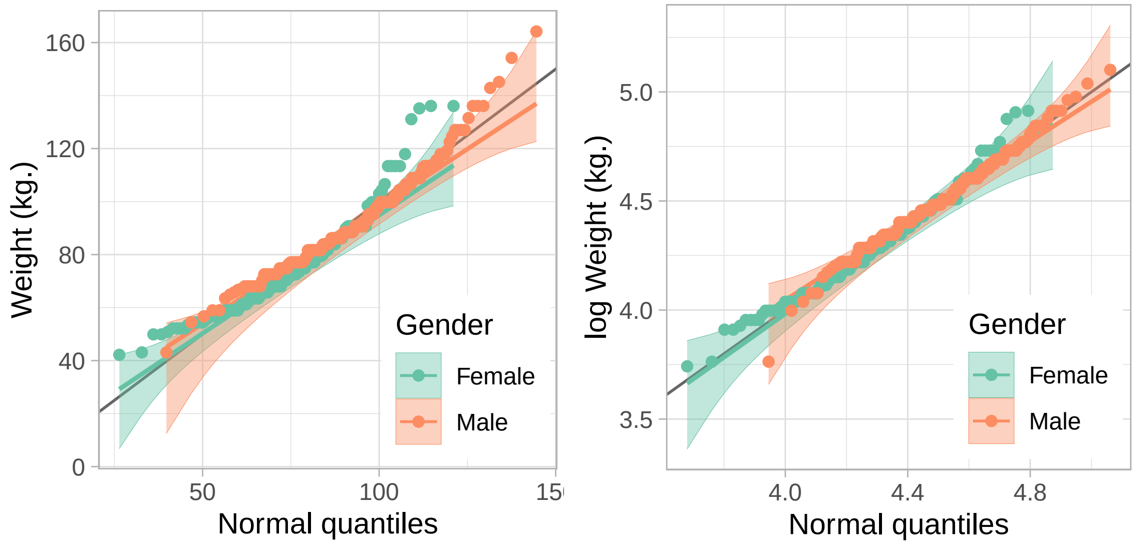
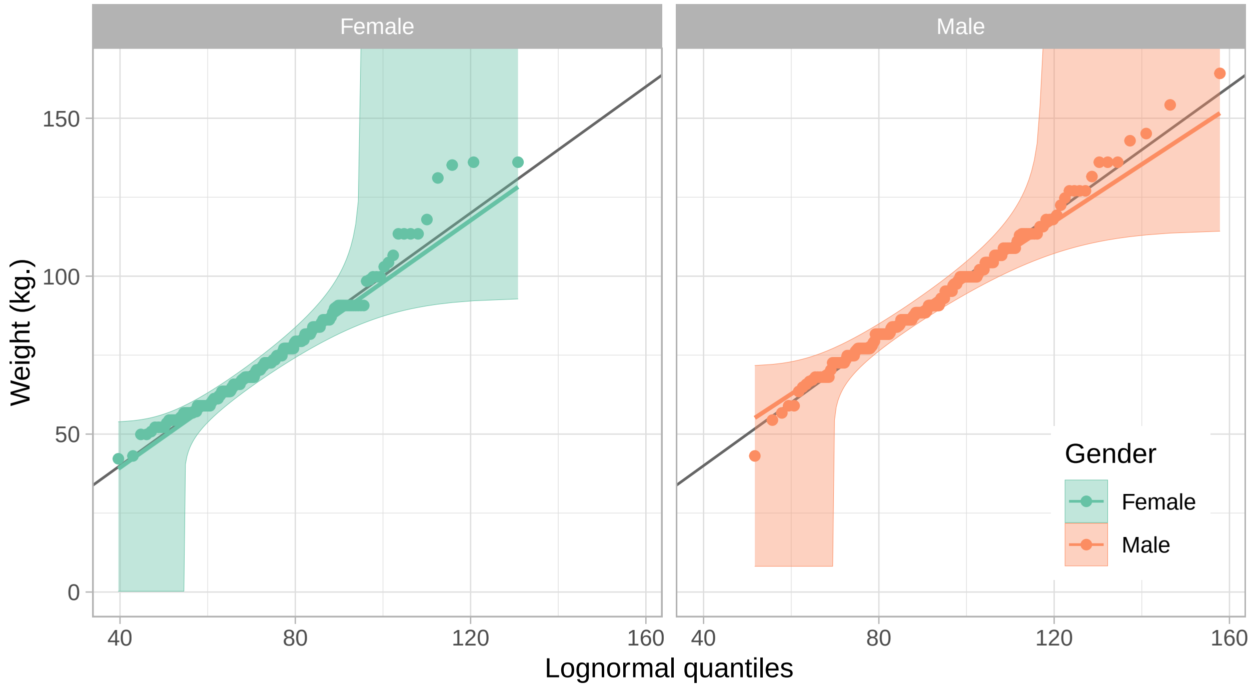


Figure 11



Dot-Pipe: an S3 Extensible Pipe for R

```
library("wrapr")
5 %.>% sin(.)
```

```
## [1] -0.9589243
```

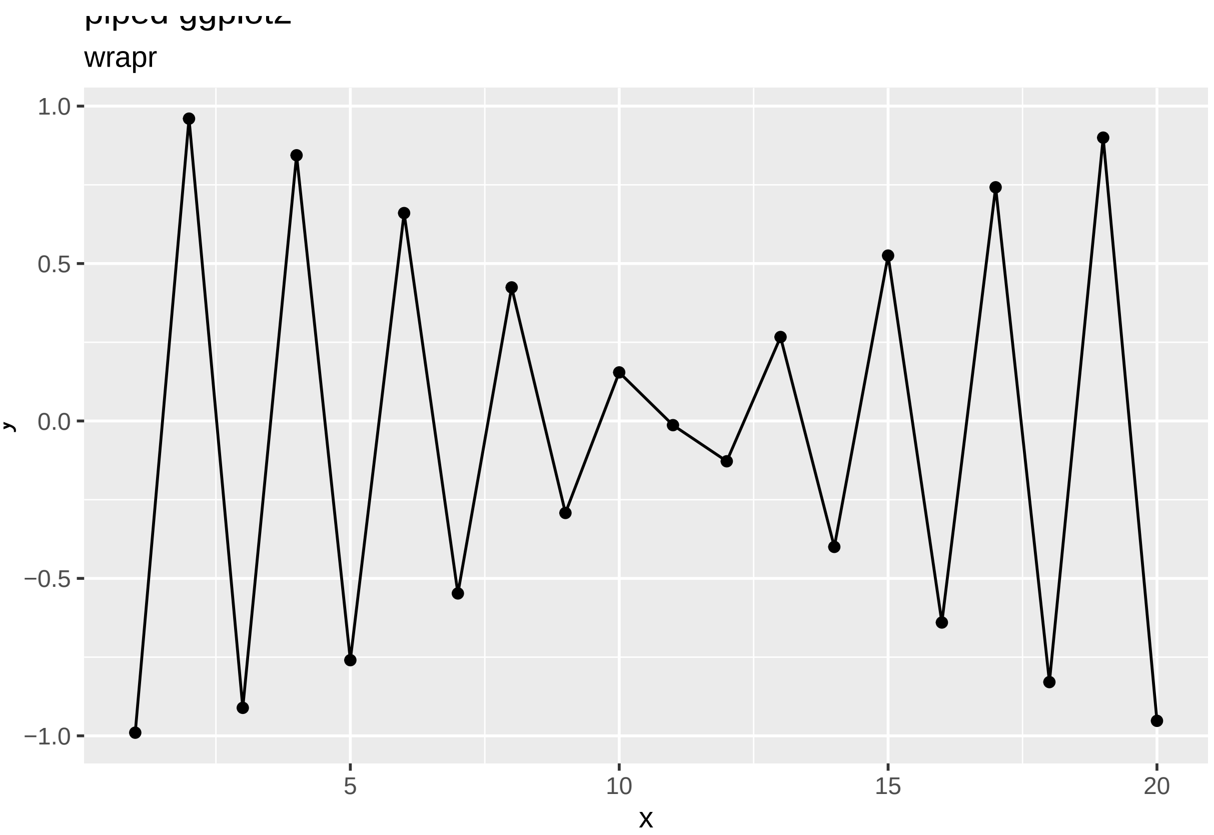
```
print(.)
```

```
## [1] 5
```

```
library("dplyr")
disp <- 4
mtcars %.>%
    filter(., .data$cyl == .env$disp) %.>%
    nrow(.)
```

```
## [1] 11
```

```
library("ggplot2")
apply_left.gg <- function(pipe_left_arg,
                          pipe_right_arg,
                          pipe_environment,
                          left_arg_name,
                          pipe_string,
                          right_arg_name) {
 pipe_right_arg <- eval(pipe_right_arg,
                        envir = pipe_environment,
                        enclos = pipe_environment)
 pipe_left_arg + pipe_right_arg
}
data.frame(x = 1:20) %.>%
mutate(., y = cos(3*x)) %.>%
ggplot(., aes(x = x,  y = y)) %.>%
geom_point() %.>%
geom_line() %.>%
ggtitle("piped ggplot2",
        subtitle = "wrapr")
```



```
library("rquery")
optree <- mk_td(table_name = "d", columns = "x") %.>%
   extend_nse(., y = cos(2*x))
class(optree)
```

```
## [1] "relop_extend" "relop"
```

```
print(optree)
```

```
## [1] "mk_td(\"d\", c( \"x\")) %.>% extend(., y := cos(2 * x))"
```

```
column_names(optree)
```

```
## [1] "x" "y"
```

```
columns_used(optree)
```

```
## $d
## [1] "x"
```

```
 # get a database connection
 db = DBI::dbConnect(RSQLite::SQLite(),
                     ":memory:")
 # make our db connection available to rquery package
 options(list("rquery.rquery_db_executor" = list(db = db)))
 data.frame(x = 1:3) %.>% optree # apply optree to d
```

```
##   x          y
## 1 1 -0.4161468
## 2 2 -0.6536436
## 3 3  0.9601703
```

```
d1 <- data.frame(x = 1)
d2 <- data.frame(x = 2)
tryCatch(
   d1 %.>% d2,
   error = function(e) { invisible(cat(format(e))) })
```

```
##   x
## 1 1
## 2 2
```

```
setMethod(
 "apply_right_S4",
 signature = c("data.frame", "data.frame"),
 definition = function(pipe_left_arg,
                       pipe_right_arg,
                       pipe_environment,
                       left_arg_name,
                       pipe_string,
                       right_arg_name) {
   rbind(pipe_left_arg, pipe_right_arg)
 })
d1 %.>% d2
```

```
##   x
## 1 1
## 2 2
```

```
d1 %.>% data.frame(x = 2)
```

```
##   x
## 1 2
```

```
library("magrittr")
5 %>% sin
```

```
## [1] -0.9589243
```

```
`%userpipe%`<- magrittr::`%>%`
tryCatch(
   5 %userpipe% sin,
   error = function(e) {e})
```

```
## <simpleError in pipes[[i]]: subscript out of bounds>
```

```
library("magrittr")
5 %>% substitute
```

```
## value
```

```
tryCatch(
   5 %>% base::sin,
   error = function(e) {e})
```

```
## <simpleError in .::base: unused argument (sin)>
```

```
d <- data.frame(x = 1:5, y = c(1, 1, 0, 1, 0))
model <- glm(y~x, family = binomial, data = d)
apply_right.glm <-
   function(pipe_left_arg,
            pipe_right_arg,
            pipe_environment,
            left_arg_name,
            pipe_string,
            right_arg_name) {
   predict(pipe_right_arg,
           newdata = pipe_left_arg,
           type ='response')
}
data.frame(x = c(1, 3)) %.>% model
```

```
##         1         2
## 0.9428669 0.6508301
```

```
# get a database connection
db = DBI::dbConnect(RSQLite::SQLite(),
                   ":memory:")
apply_right.SQLiteConnection <-
   function(pipe_left_arg,
            pipe_right_arg,
            pipe_environment,
            left_arg_name,
            pipe_string,
            right_arg_name) {
 DBI::dbGetQuery(pipe_right_arg, pipe_left_arg)
}
"SELECT * FROM sqlite_temp_master" %.>% db
```

```
## [1] type     name     tbl_name rootpage sql
## <0 rows> (or 0-length row.names)
```

```
apply_left.character <- function(pipe_left_arg,
                                 pipe_right_arg,
                                 pipe_environment,
                                 left_arg_name,
                                 pipe_string,
                                 right_arg_name) {
   pipe_right_arg <- eval(pipe_right_arg,
                          envir = pipe_environment,
                          enclos = pipe_environment)
   paste0(pipe_left_arg, pipe_right_arg)
 }
"a" %.>% "b" %.>% "c"
```

```
## [1] "abc"
```

```
apply_left.formula <- function(pipe_left_arg,
                               pipe_right_arg,
                               pipe_environment,
                               left_arg_name,
                               pipe_string,
                               right_arg_name) {
   pipe_right_arg <- eval(pipe_right_arg,
                          envir = pipe_environment,
                          enclos = pipe_environment)
   pipe_right_arg <- paste(pipe_right_arg, collapse = " + ")
   update(pipe_left_arg, paste(" ~ . +", pipe_right_arg))
}
(y~a) %.>% c("b", "c", "d") %.>% "e"
```

```
## y ~ a + b + c + d + e
```