

# Package ‘aperçu’

December 6, 2019

**Type** Package

**Date** 2019-12-05

**Title** Quick Look at your Data

**Version** 0.2.4

**Author** Aurelien Chateigner <aurelien.chateigner@gmail.com>

**Maintainer** Aurelien Chateigner <aurelien.chateigner@gmail.com>

**Description** The goal is to print an “aperçu”, a short view of a vector, a matrix, a data.frame, a list or an array. By default, it prints the first 5 elements of each dimension. By default, the number of columns is equal to the number of lines. If you want to control the selection of the elements, you can pass a list, with each element being a vector giving the selection for each dimension.

**License** CC BY-SA 4.0

**Encoding** UTF-8

**LazyData** true

**RoxygenNote** 7.0.2

**Imports** pls

**Suggests** testthat

**NeedsCompilation** no

**Repository** CRAN

**Date/Publication** 2019-12-06 08:10:02 UTC

## R topics documented:

ap .....	2
<b>Index</b>	<b>5</b>

---

ap *Aperçu of your object*

---

## Description

Some says that size doesn't matter, but when it comes to data it does. The goal is to print an "aperçu", a short view of an object.

## Usage

```
ap(object, limitsList = limitsLister(object), pA = FALSE)
```

## Arguments

object	A vector, matrix, data frame, list or array
limitsList	A list with each element being the selection of each dimension
pA	Boolean, to only print the aperçu (FALSE) or to also print the dimensions and classes (TRUE)

## Details

The goal is to print an "aperçu", a short view of a vector, a matrix, a data.frame, a list or an array. By default, it prints the first 5 elements of each dimension. By default, the number of columns is equal to the number of lines. If you want to control the selection of the elements, you can pass a list, with each element being a vector giving the selection for each dimension. This function provides a simpler way of using the '[' function, with the same speed and flexibility.

## Value

A quick look or a selection of the data

## Examples

```
# Creation of a vector, a matrix, a data frame, a list and 3 arrays of 3, 4
# and 5 dimensions:
v <- c(1:20)
names(v) <- letters[1:20]
m <- matrix(1:100, 10, 10)
dimnames(m) <- list(letters[1:10], letters[1:10])
df <- as.data.frame(m)
li <- lapply(1:10, function(x) {
  u <- matrix((1:100)*x, 10,10)
  dimnames(u) <- list(letters[1:10], letters[1:10])
  return(u)
})
names(li) <- letters[1:10]
a <- array(c(1:1000), c(10,10,10))
dimnames(a) <- list(letters[1:10], letters[1:10], letters[1:10])
```

```

a2 <- array(1:10000, c(10,10,10,10))
dimnames(a2) <- list(letters[1:10], letters[1:10], letters[1:10],
  letters[1:10])
a3 <- array(1:100000, c(10,10,10,10,10))
dimnames(a3) <- list(letters[1:10], letters[1:10], letters[1:10],
  letters[1:10], letters[1:10])

# Automatic apply of the objects
ap(v)
ap(m)
ap(df)
ap(li)
ap(a)
ap(a2)
ap(a3)

# To print also the dimensions and classes
ap(v, pA = TRUE)
ap(m, pA = TRUE)
ap(df, pA = TRUE)
ap(li, pA = TRUE)
ap(a, pA = TRUE)
ap(a2, pA = TRUE)
ap(a3, pA = TRUE)
# if the size of the object is very small :
sm <- matrix(1:4, 2, 2)
sDf <- as.data.frame(sm)
ap(sm)
ap(sDf)

# Specific apply of the objects
ap(v, list(1:2))
ap(m, list(c(1,3), 1:5))
## outputs a vector as only one dimension is given
ap(m, list(c(1,3,1:5)))
## outputs lines 1, 3 and 5, and columns 1 to 10
ap(df, list(c(1,3,5), 1:10))
## the result is different between a list and an array
## as the dimensions of both are not in the same order
ap(li, list(c(1:3,5),c(4,6,9), c(3,6)))
ap(a, list(c(1:3,5),c(4,6,9), c(3,6)))
## outputs the element a[1,3,5]
ap(a, list(1,3,5))
## outputs the element a[c(1,3,5),1,1]
ap(a, list(c(1,3,5)))
ap(a2, list(1:4,3:5,2:8,3:4))
ap(a3, list(1:4,3:5,2:3,3:4,7:10))

# It also works with data frames with a matrix in it:
library(pls)
data("gasoline")
ap(gasoline)

```

```
ap(gasoline, list(1:10, list(1:10,1:10)))
```

# Index

ap, [2](#)