

# Tim Riffe Personal

 Search this site

## Navigation

[Right Now](#)
[Demog Blog](#)
[About Me](#)

### ▼ R Code

[Package](#)
[Downloads](#)
[Graph Gallery](#)
[▶ LexisSurface](#)
[▶ DecompHoriuchi](#)

### ▼ LexisDiagram

[LexisDiagram-  
package](#)
[Lexis](#)
[Thightlight](#)
[▶ HMDget  
\(deprecated\)](#)
[▶ LifeTable](#)
[▶ Lotka](#)
[▶ Pyramid](#)
[▶ RateSketch](#)

## Curriculum Vitae



## Recent site activity

[dataviz workshop pre  
#PAA2016 @PRBdata  
@minnpop @MPIDRnews](#)  
edited by Tim Riffe

[Decomposing the  
population pyramid à la  
Vaupel & Yashin \(1987\)](#)  
edited by Tim Riffe  
attachment from Tim Riffe

[FAQ: The 1/3 and 2/3 in  
the HMD version 5  
exposure formula](#)

[R Code](#) ▶ [LexisDiagram](#) ▶ □

## Lexis

Lexis {EZLex}

[R Documentation](#)

## A function for drawing Lexis diagrams!

## Description

A function for drawing Lexis diagrams! Specify an age and year range. Labels are optional. Also includes a triangle highlighting function that works by clicking.

## Usage

```
Lexis(ages, years, labs = T, col = "black")
```

## Arguments

- ages** a vector of age values. ex `c(15:25)`. Horizontal lines are drawn at these points.
- years** a vector of year values. ex `c(2000:2004)`. Vertical lines are drawn at these points.
- labs** logical. default = TRUE. Should age, year and generation labels be drawn in the margins? For large spans of years and ages it's best to specify FALSE.
- col** The line color to be used. Default = "black".

## Details

Nothing fancy here. Please report bugs!

## Value

graphical device is activated with appropriate dimensions.  
Lexis diagram is drawn.

## Note

edited by Tim Riffe  
attachment from Tim Riffe

[#PAA2016 where to find me](#)

edited by Tim Riffe

[dataviz workshop pre](#)

[#PAA2016 @PRBdata](#)

[@minnpop @MPIDRnews](#)

edited by Tim Riffe

[View All](#)

Great for presentation graphics and in the classroom!

## Author(s)

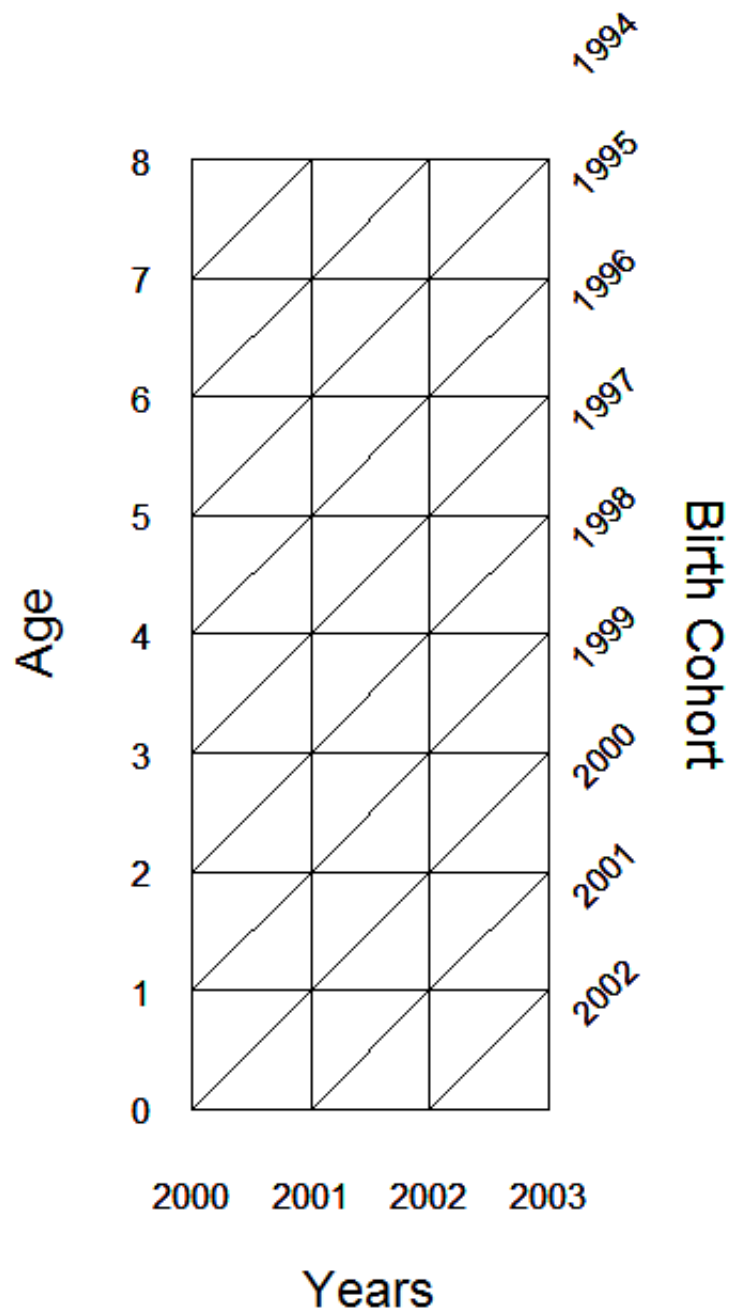
Tim Riffe

## See Also

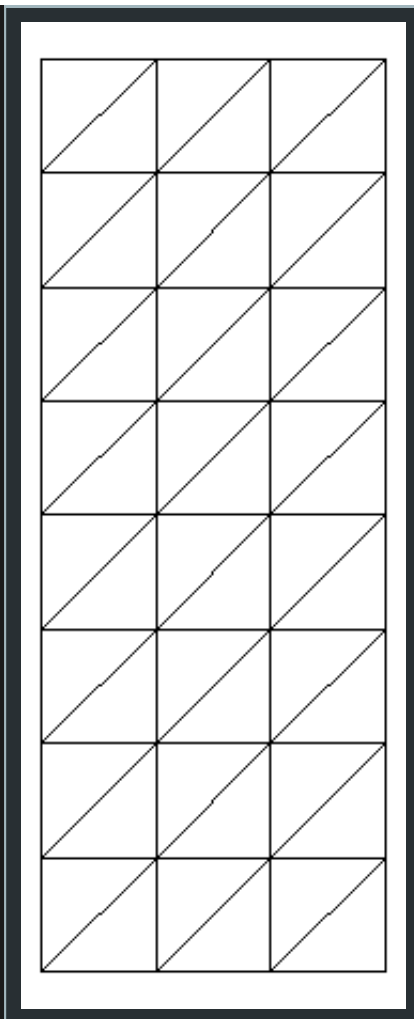
See Also as [Thighlight](#)

## Examples

```
Lexis(ages=0:8,years=2000:2003,labs=T)
```



```
Lexis(ages=0:8,years=2000:2003,labs=F)
```



## The function is currently defined as

```
function(ages,years,labs=T,col="black"){
  xrange <- diff(range(years))
  yrange <- diff(range(ages))
  maxrange <- max(c(xrange,yrange))
  xrange <- xrange*(5/maxrange)
  yrange <- yrange*(5/maxrange)
  if (labs==T){
    # x coordinate for generations
    interval <- 5/max(c(length(ages),length(years)))
    genx <- max(years)+ .25/interval
    # year labels don't always fit:
    x <- years; y <- ages; xn <- length(x)
    windows(width=xrange+2,height=yrange+2)
    par(mai=c(1,1,1,1))
    plot(NA,type="n",xlim=c(min(x),max(x)),ylim=c(min(y),max(y)),col=col)
    segments(x,min(ages),x,max(ages),col=col)
    for (i in 1:(xn-1)) {
      segments(rep(x[i],(xn-1)),y[-1],y[-1],y[1])
      axis(1,at=x,labels=x,tick=F,pch="n")
      axis(2,at=y,labels=y,tick=F,pch="n")
      for (i in 1:yn){
        text(genx,y[i]+1,labels=y[i])
      }
      text(genx+.5/interval,mean(y))
    }
  }
}
```

```
    }  
  }  
  if (labs==F){  
    windows(width=xrange,height=yrange)  
    par(mai=c(0,0,0,0))  
    x <- years; y <- ages; xn <- length(x)  
    plot(NA,type="n",xlim=c(min(x),max(x))  
    segments(x,min(ages),x,max(ages),col=  
    for (i in 1:(xn-1)) {  
      segments(rep(x[i],(xn-1)),y[-yn],rep(  
    }  
  }  
}
```

---

[Package *EZLex* version 1.0 [Index](#)]

## Comments

You do not have permission to add comments.

---

[Sign in](#) | [Recent Site Activity](#) | [Report Abuse](#) | [Print Page](#) | Powered By [Google Sites](#)