

# görselleştirme2

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```
#install.packages("tidyverse")
library(tidyverse)
```

```
## — Attaching packages — tidyverse 1.3.2 —
## ✓ ggplot2 3.3.6      ✓ purrr 0.3.4
## ✓ tibble 3.1.7       ✓ dplyr 1.0.9
## ✓ tidyr 1.2.0        ✓ stringr 1.4.0
## ✓ readr 2.1.2        ✓ forcats 0.5.1
## — Conflicts — tidyverse_conflicts() —
## ✖ dplyr::filter() masks stats::filter()
## ✖ dplyr::lag()     masks stats::lag()
```

```
install.packages("gapminder")
```

```
## Installing package into '/home/ilke/R/x86_64-pc-linux-gnu-library/3.4'
## (as 'lib' is unspecified)
```

```
library(gapminder)
```

```
data(gapminder)
```

```
View(gapminder)
```

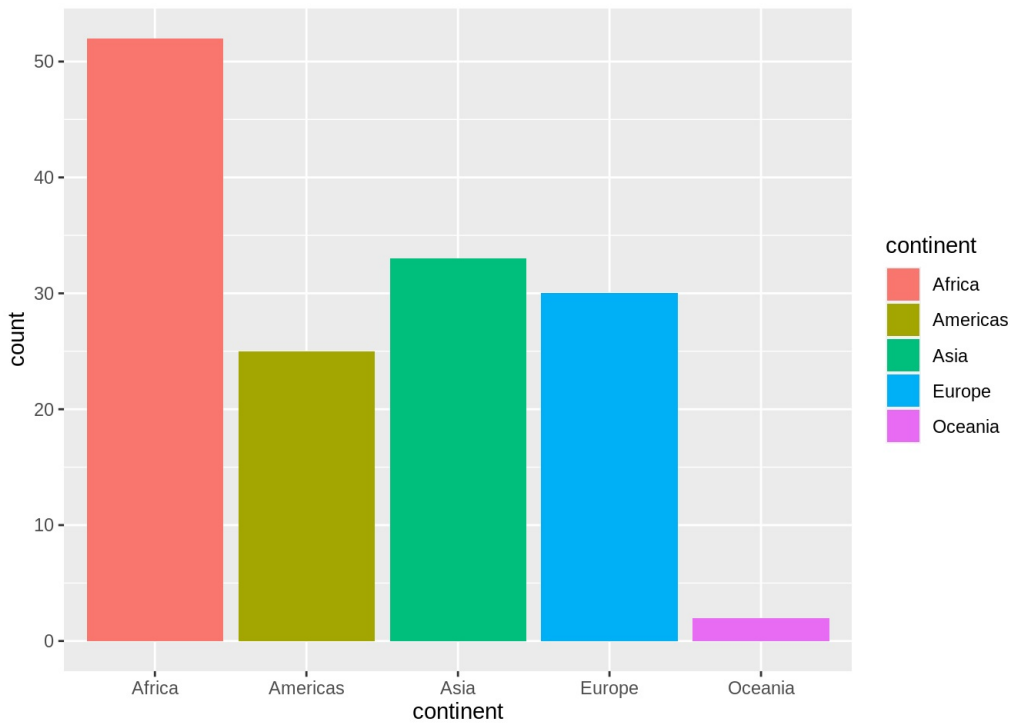
```
gapminder_1972<-gapminder %>%
  select(country, continent, year, lifeExp, pop, gdpPercap) %>%
  filter(year==1972)
```

```
gapminder_1972
```

```
## # A tibble: 142 × 6
##   country    continent  year lifeExp      pop gdpPercap
##   <fct>      <fct>    <int>   <dbl>    <int>    <dbl>
## 1 Afghanistan Asia      1972   36.1 13079460    740.
## 2 Albania    Europe    1972   67.7  2263554   3313.
## 3 Algeria    Africa    1972   54.5 14760787   4183.
## 4 Angola     Africa    1972   37.9  5894858   5473.
## 5 Argentina  Americas  1972   67.1 24779799   9443.
## 6 Australia  Oceania   1972   71.9 13177000  16789.
## 7 Austria    Europe    1972   70.6  7544201  16662.
## 8 Bahrain    Asia      1972   63.3   230800  18269.
## 9 Bangladesh Asia      1972   45.3  70759295    630.
## 10 Belgium   Europe    1972   71.4  9709100  16672.
## # ... with 132 more rows
```

1972 yılı alt verileri kıtalar/ülkeler için bar grafiği

```
ggplot(gapminder_1972, aes(x=continent, fill=continent)) +
  geom_bar()
```



Her bir kıta için ort yaşam sürelerini hesaplayalım.

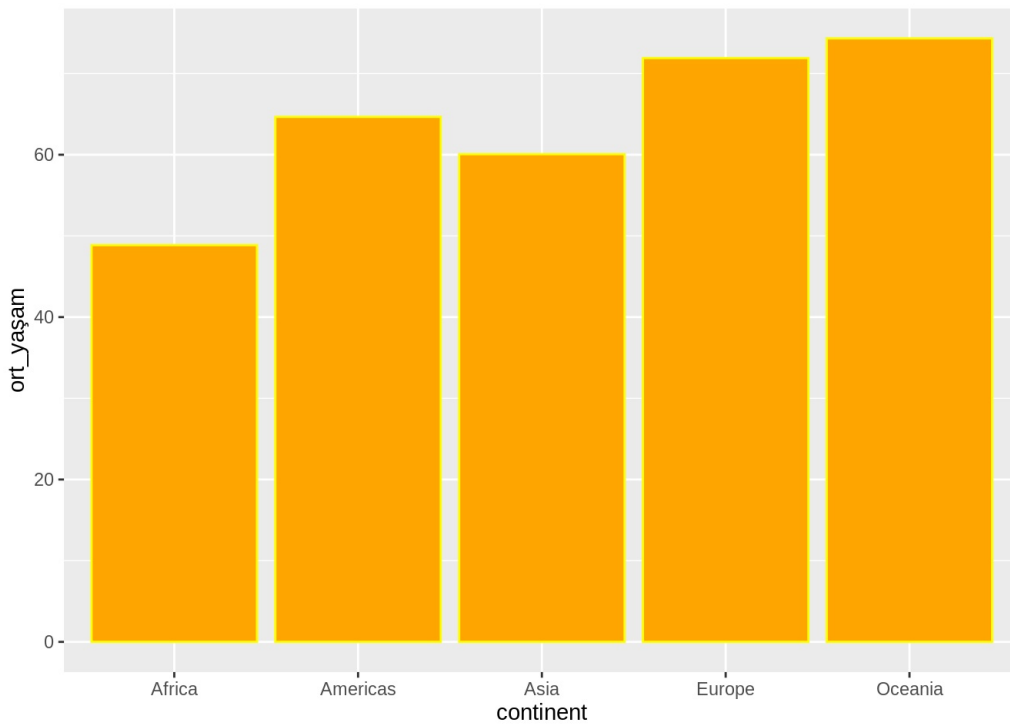
```
kıta_yaşam_süreleri<-gapminder %>%  
  group_by(continent)%>%  
  summarize(ort_yaşam=mean(lifeExp))
```

kıta\_yaşam\_süreleri

```
## # A tibble: 5 × 2  
##   continent ort_yaşam  
##   <fct>      <dbl>  
## 1 Africa      48.9  
## 2 Americas    64.7  
## 3 Asia       60.1  
## 4 Europe     71.9  
## 5 Oceania    74.3
```

kıtaların ortalama yaşam sürelerini Bar grafikte gösterelim.

```
ggplot(kıta_yaşam_süreleri, aes(x=continent, y=ort_yaşam)) +  
  geom_bar(stat="identity", fill="orange", color="yellow")
```



gdpPercap, country, year değişkenlerinden oluşan alt veri setini çekelim. Sadece ülke==france olanları filtreliyoruz.

```
gapminder_france<- gapminder %>%  
  select(gdpPercap,year,country) %>%  
  filter(country== 'France')
```

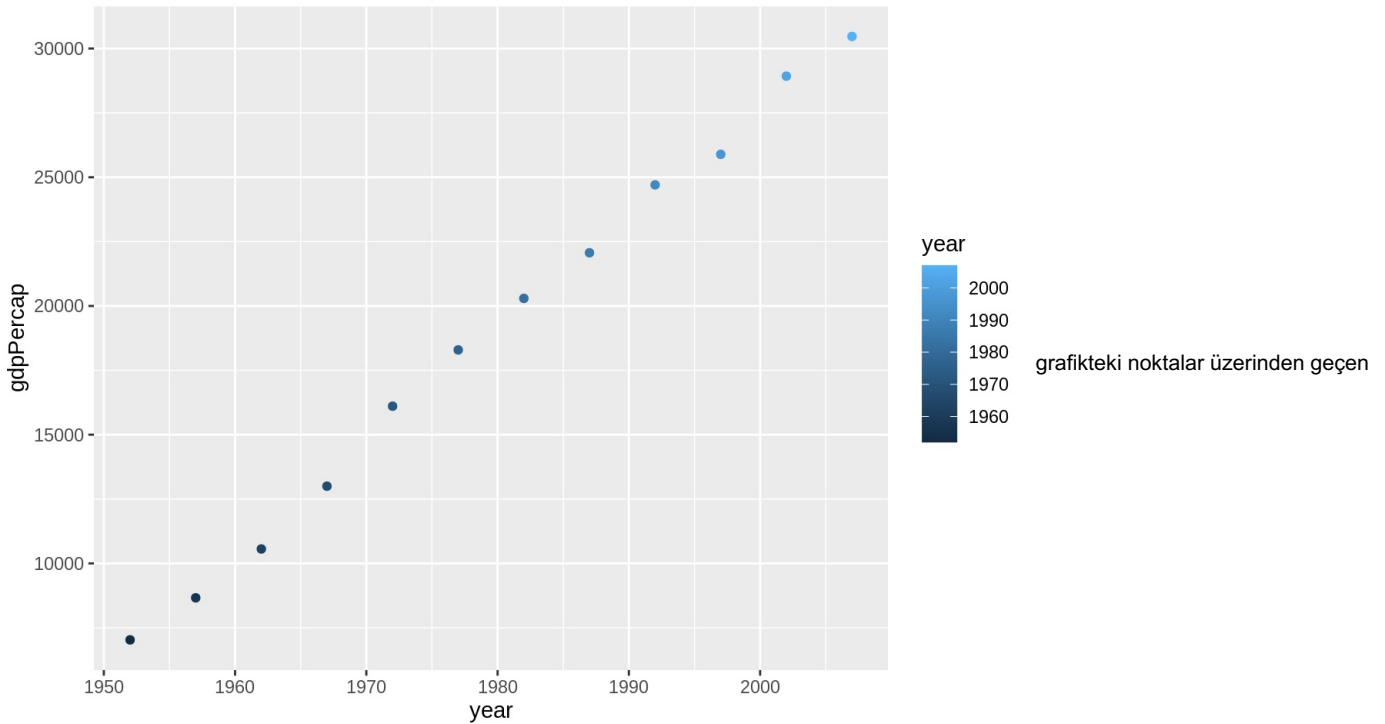
gapminder\_france

```
## # A tibble: 12 × 3  
##   gdpPercap year country  
##   <dbl> <int> <fct>  
## 1    7030.  1952 France  
## 2    8663.  1957 France  
## 3   10560.  1962 France  
## 4   13000.  1967 France  
## 5   16107.  1972 France  
## 6   18293.  1977 France  
## 7   20294.  1982 France  
## 8   22066.  1987 France  
## 9   24704.  1992 France  
## 10  25890.  1997 France  
## 11  28926.  2002 France  
## 12  30470.  2007 France
```

oluşturduğumuz alt veri setini yıllara göre gdpPercap değişkenini serpilme diyagramı

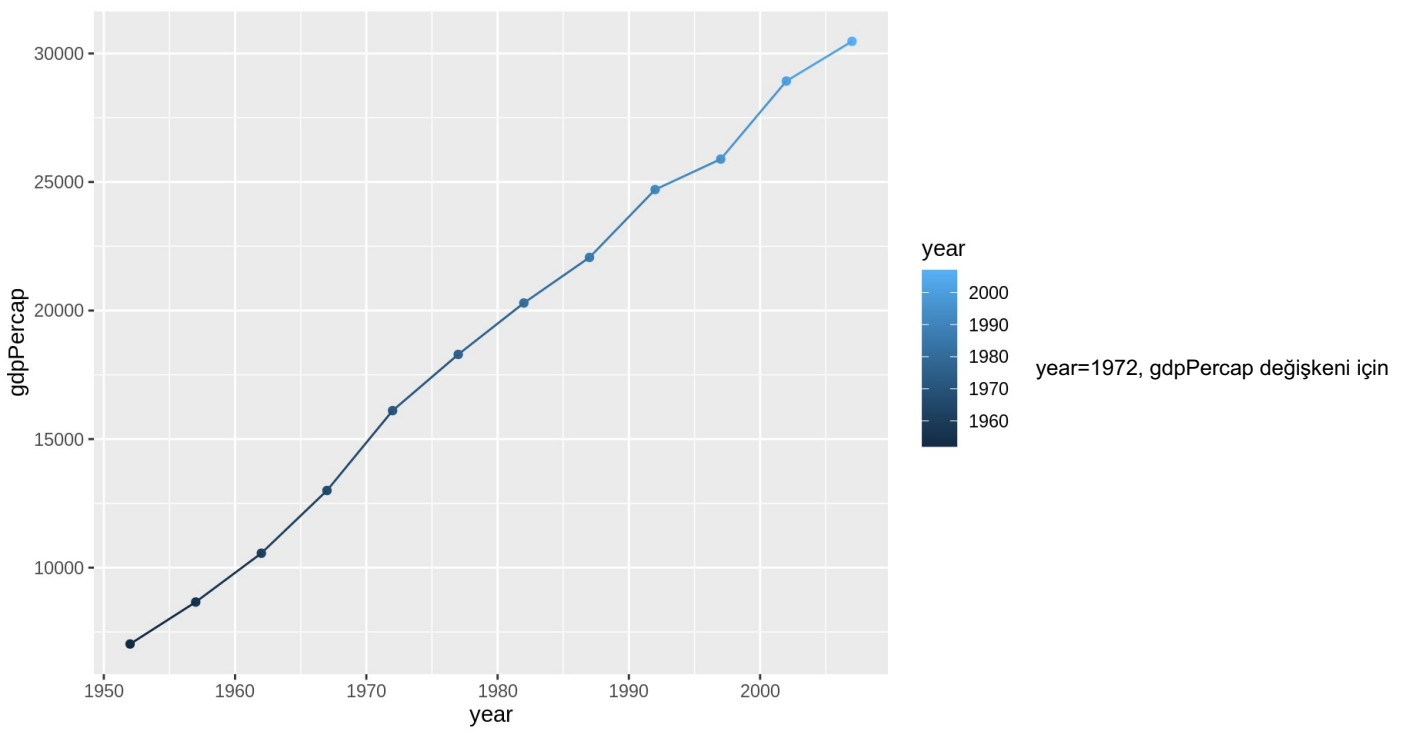
```
france_gsmh<- ggplot(gapminder_france, aes(x=year,y=gdpPercap, colour=year)) +  
  geom_point()
```

france\_gsmh



çizgi grafiği ekleme

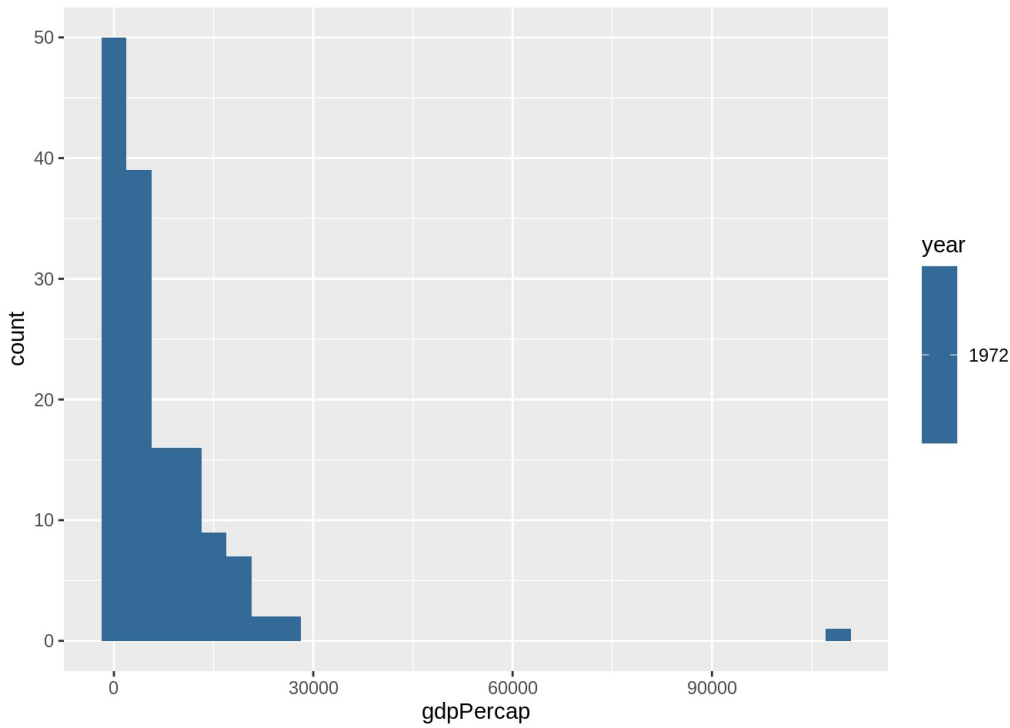
```
france_gsmh+geom_line()
```



histogram (olasılık yoğunluk fonksiyonunun temsili gösterimi)

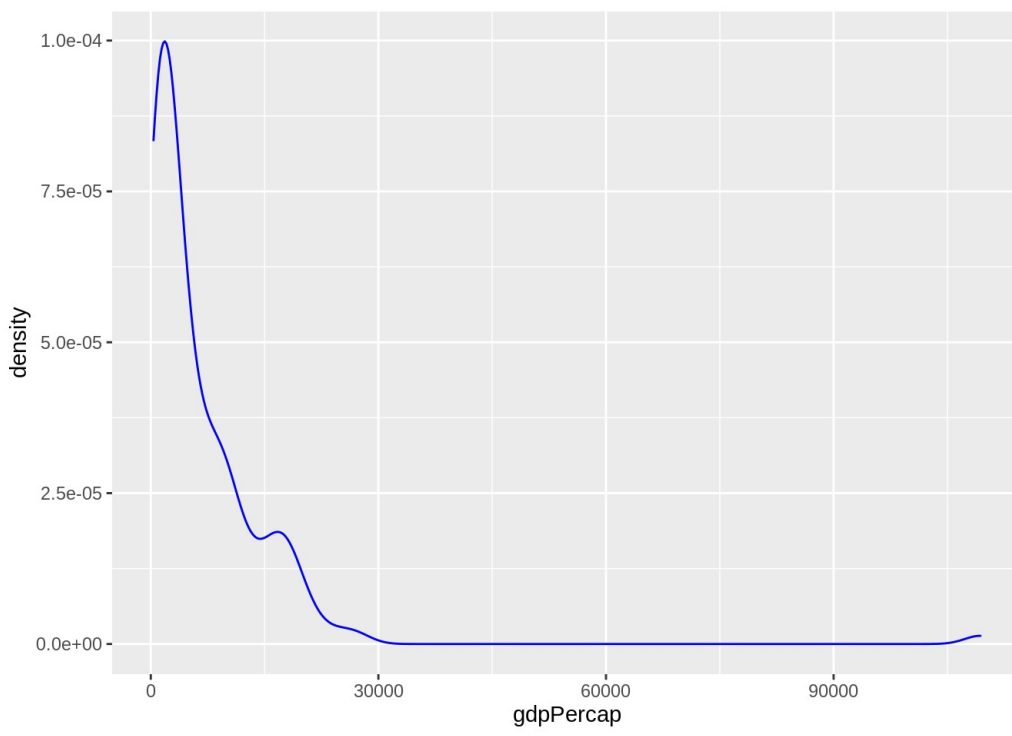
```
ggplot(gapminder_1972,aes(x=gdpPercap, fill=year))+  
  geom_histogram()
```

```
## `stat_bin()` using `bins = 30`. Pick better value with `binwidth`.
```



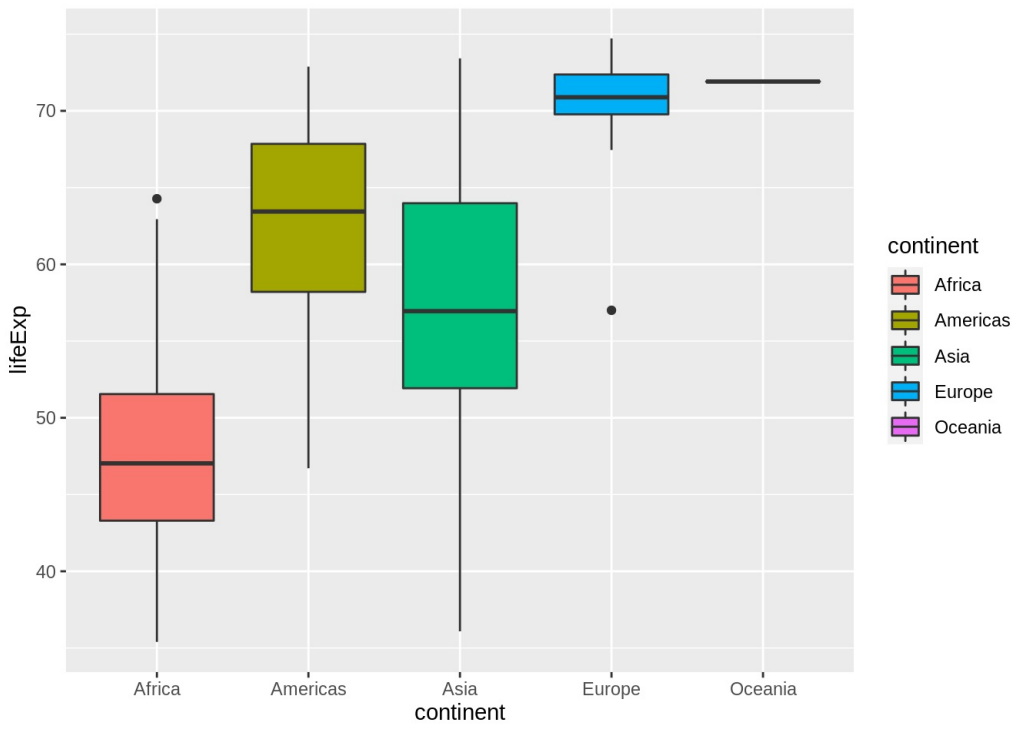
değişkenin yoğunluk fonksiyonunu çizdirelim

```
ggplot(gapminder_1972,aes(x=gdpPercap))+  
  geom_density(color="blue")
```

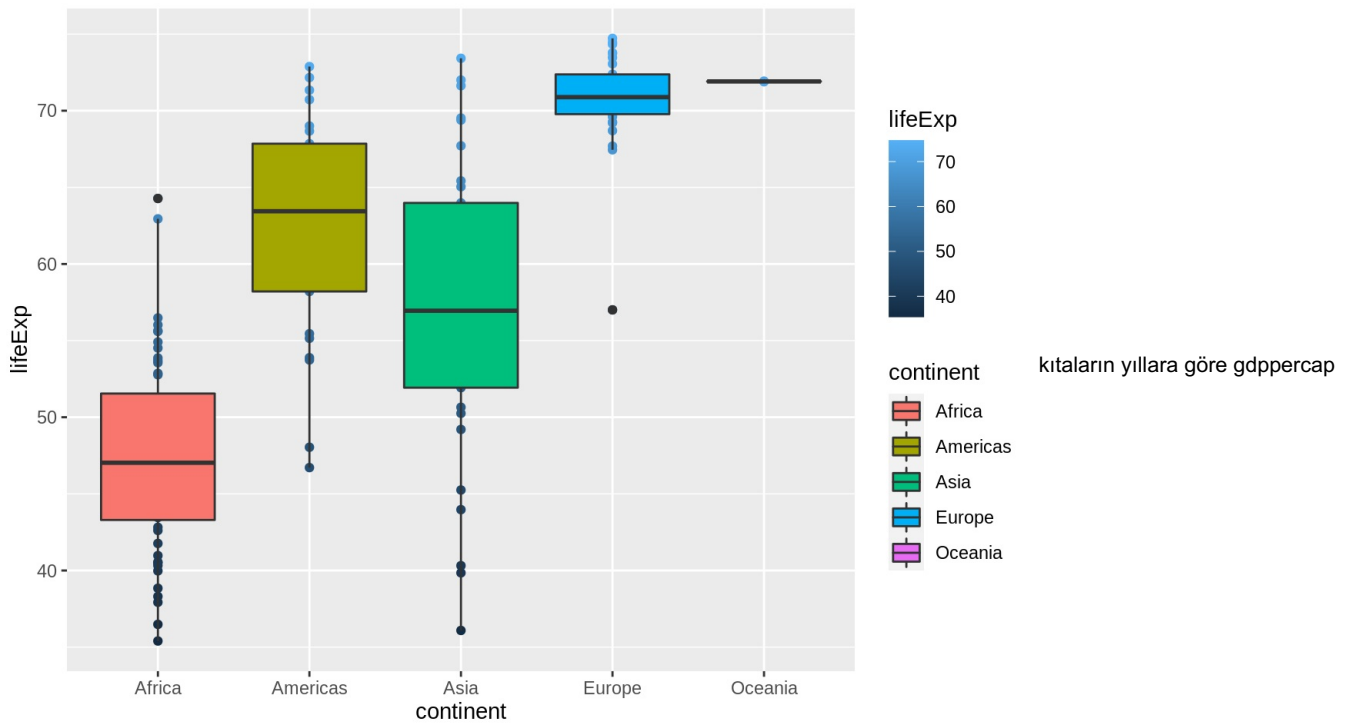


1972 yılı her bir kıta için ortalama yaşam süresi karşılaştırılım

```
ggplot(gapminder_1972,aes(x=continent, y=lifeExp, fill=continent))+  
  geom_boxplot()
```



```
ggplot(gapminder_1972,aes(x=continent, y=lifeExp, colour=lifeExp, fill=continent))+  
  geom_point()+  
  geom_boxplot()
```

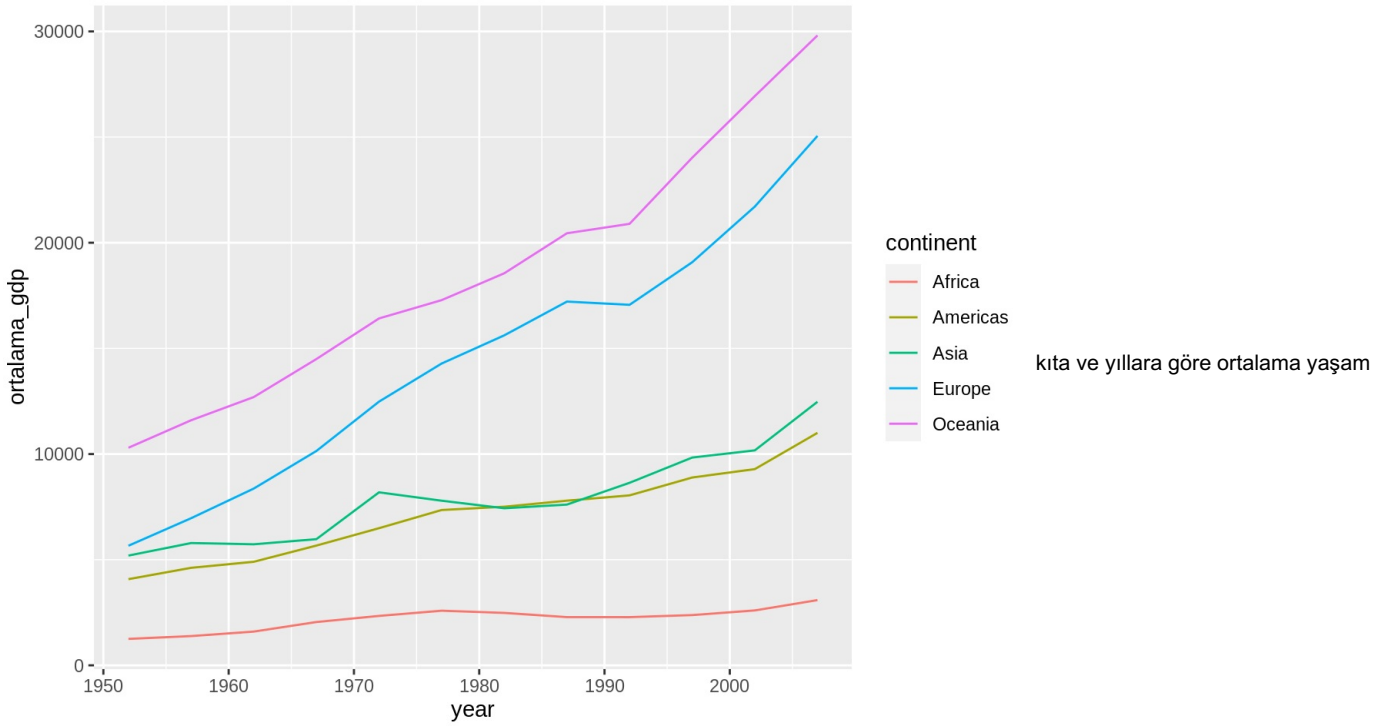


değişimlerini karşılaştıralım

```
gap_gdp<-gapminder %>%
  group_by(continent,year) %>%
  summarise(ortalama_gdp=mean(gdpPercap))
```

```
## `summarise()` has grouped output by 'continent'. You can override using the
## `.groups` argument.
```

```
ggplot(gap_gdp,aes(x=year,y=ortalama_gdp,color=continent))+
  geom_line()
```



süresi karşılaştırma

```
gap_gdp<-gapminder %>%
  group_by(continent,year) %>%
  summarise(ortalama_ömür=mean(lifeExp))
```

```
## `summarise()` has grouped output by 'continent'. You can override using the
## `.groups` argument.
```

```
ggplot(gap_gdp,aes(x=year,y=ortalama_ömür,color=continent))+  
geom_line()
```

