Mixing Times of Stochastic Matrices

Ali Taqi
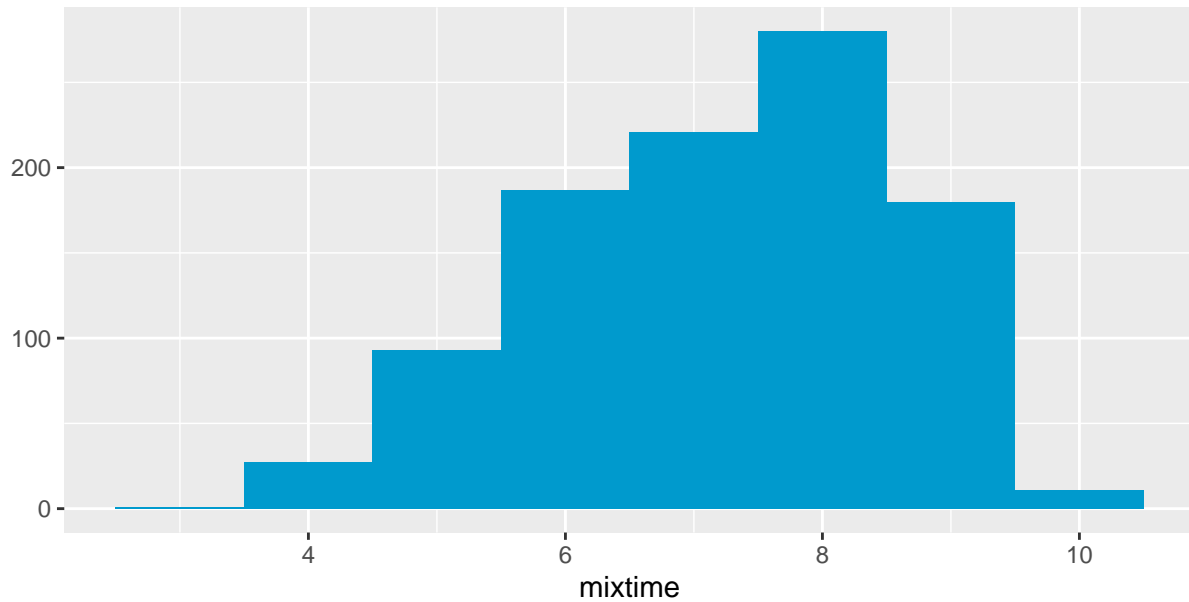
2/15/2021

Stochastic Matrix Mixing Time

```
##             [,1]      [,2]      [,3]      [,4]
## [1,] 0.0000000 0.3499840 0.3358215 0.3141945
## [2,] 0.3494776 0.0000000 0.3976092 0.2529132
## [3,] 0.2373802 0.2814629 0.0000000 0.4811569
## [4,] 0.2517248 0.2029214 0.5453537 0.0000000
```
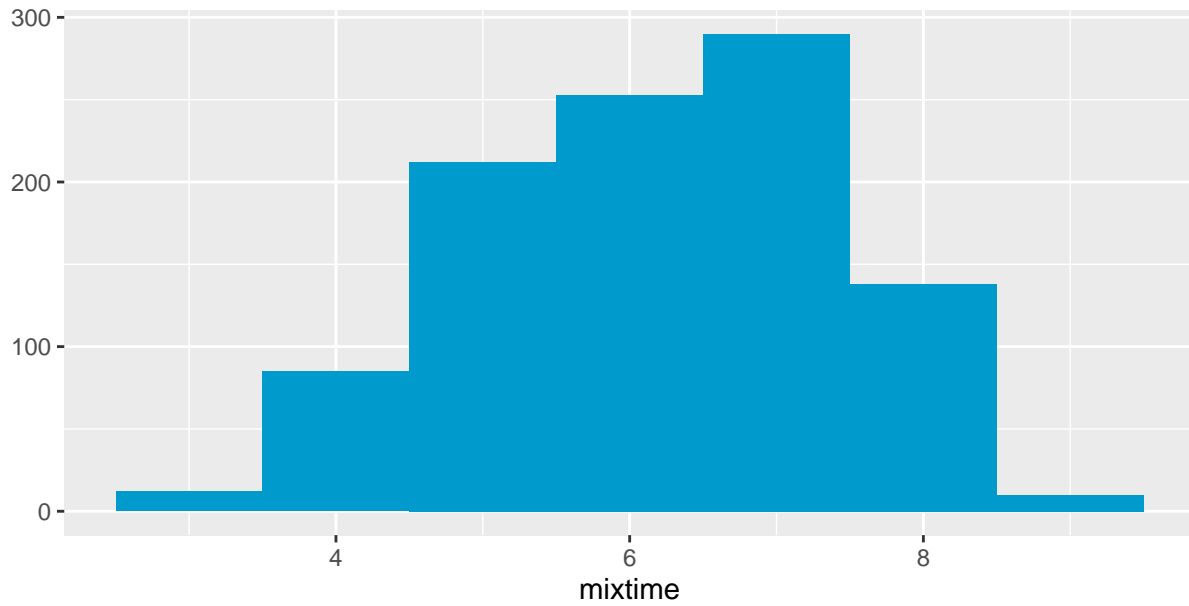
Epsilon = 0.01

Mixing Time Distribution for a Stochastic Matrix


```
## [1] "This batch is 100% mixed."
```
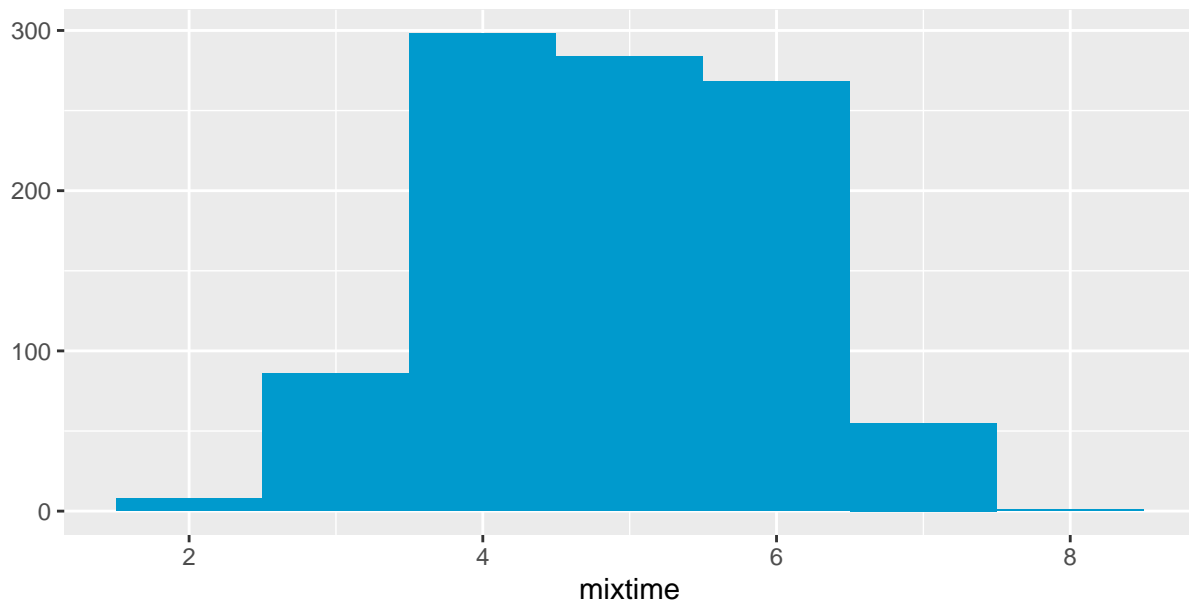
Epsilon = 0.02

Mixing Time Distribution for a Stochastic Matrix


```
## [1] "This batch is 100% mixed."
```

Epsilon = 0.05

Mixing Time Distribution for a Stochastic Matrix


```
## [1] "This batch is 100% mixed."
```
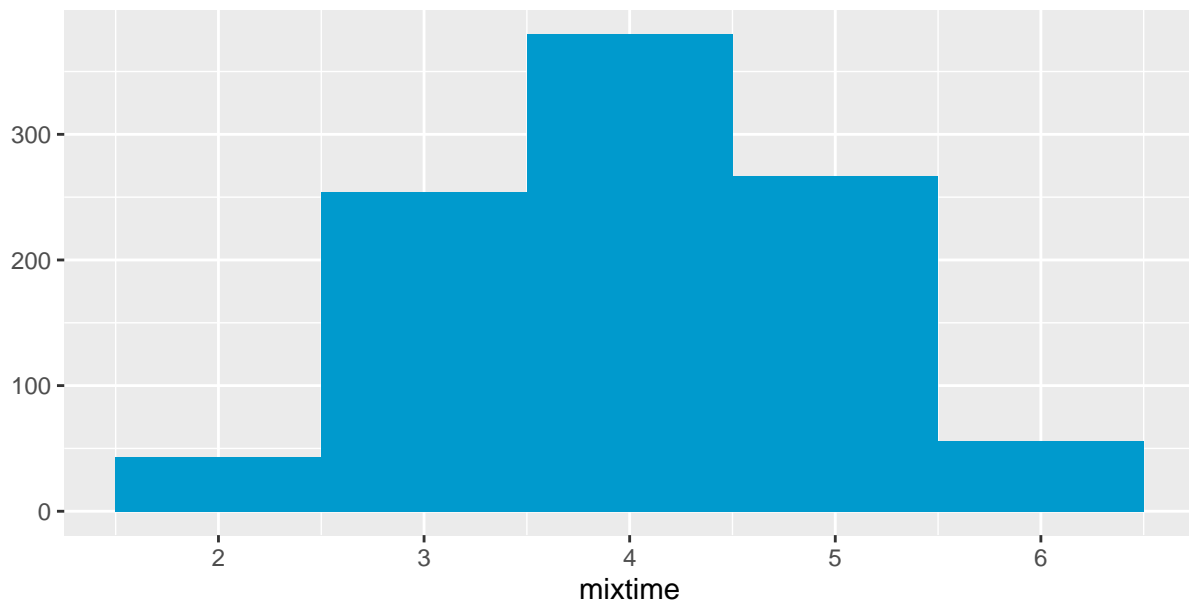
2

Epsilon = 0.1

Mixing Time Distribution for a Stochastic Matrix


```
## [1] "This batch is 100% mixed."
```

Epsilon = 0.2

Mixing Time Distribution for a Stochastic Matrix


```
## [1] "This batch is 100% mixed."
```