

Web Data Collection with R

JSON

Peter Meißner / 2016-02-29 – 2016-03-04 / ECPR WSMT

How JSON Works

How JSON Works

How JSON Works

- ▶ **JavaScript Object Notation**
- ▶ data storage format used by most Web APIs
- ▶ uses, { } , : " \ to describe data
- ▶ is quite similar to a list in R
- ▶ transforming JSON into some R data type is quite easy
[jsonlite]

How JSON Works

```
json <-  
'{  
  "list" : {  
    "name" : "Peter",  
    "living in" : "Konstanz",  
    "course" : 108,  
    "students" : [ {"name": "Paul", "age" : 20} ,  
                   {"name": "Mary", "age" : 99}  
  ]  
}  
'
```

How JSON Works

```
library(jsonlite)
```

```
##
```

```
## Attaching package: 'jsonlite'
```

```
## Die folgenden Objekte sind maskiert von 'package:RJSONIO'
```

```
##
```

```
##      fromJSON, toJSON
```

```
list <- fromJSON(json)
```

```
list
```

```
## $list
```

```
## $list$name
```

```
## [1] "Peter"
```

```
##
```

```
## $list$`living in`
```

```
## [1] "Konstanz"
```

```
##
```

How JSON Works

```
df <- as.data.frame(list)
df[,1:3]
```

```
##    list.name list.living.in list.course
## 1      Peter      Konstanz      108
## 2      Peter      Konstanz      108
```

```
df[, -c(1:3)]
```

```
##    list.students.name list.students.age
## 1                Paul                20
## 2                Mary                99
```