Visualization of tagged data

The report contains the following visualizations.

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9. Number of tags shared by objects
10. Number of objects shared by tags

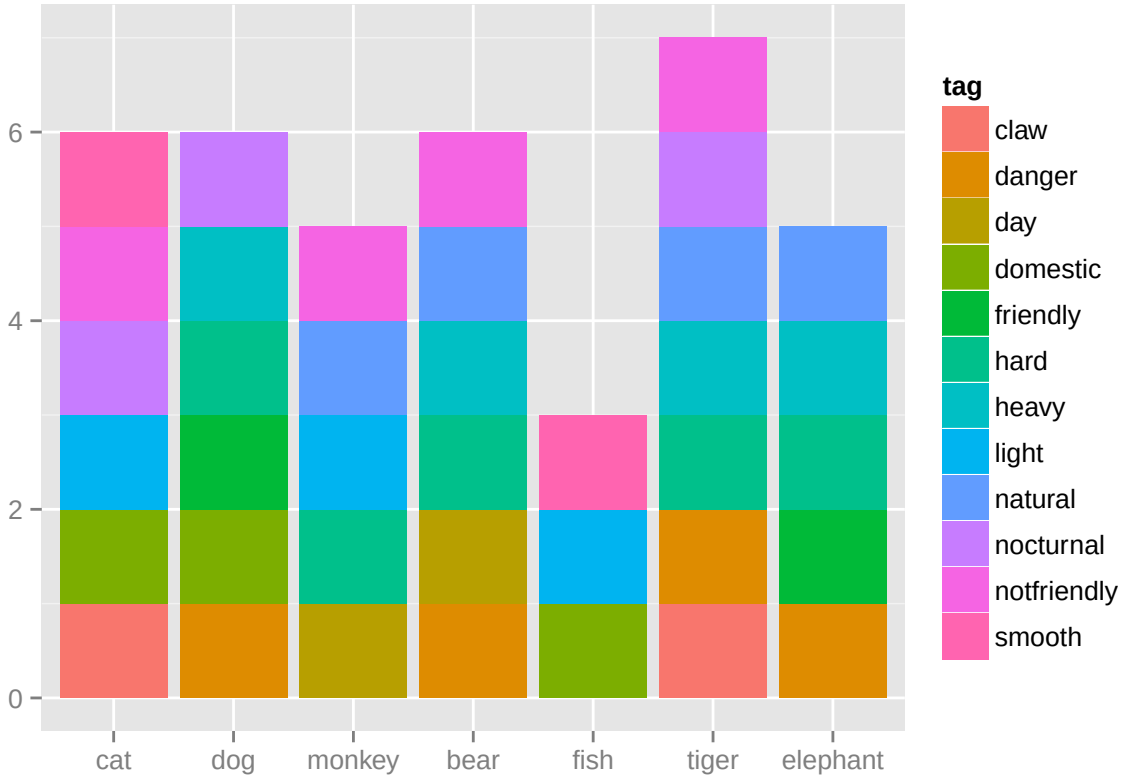
The objects are:

```
## [1] "cat"      "dog"      "monkey"   "bear"     "fish"     "tiger"
## [7] "elephant"
```

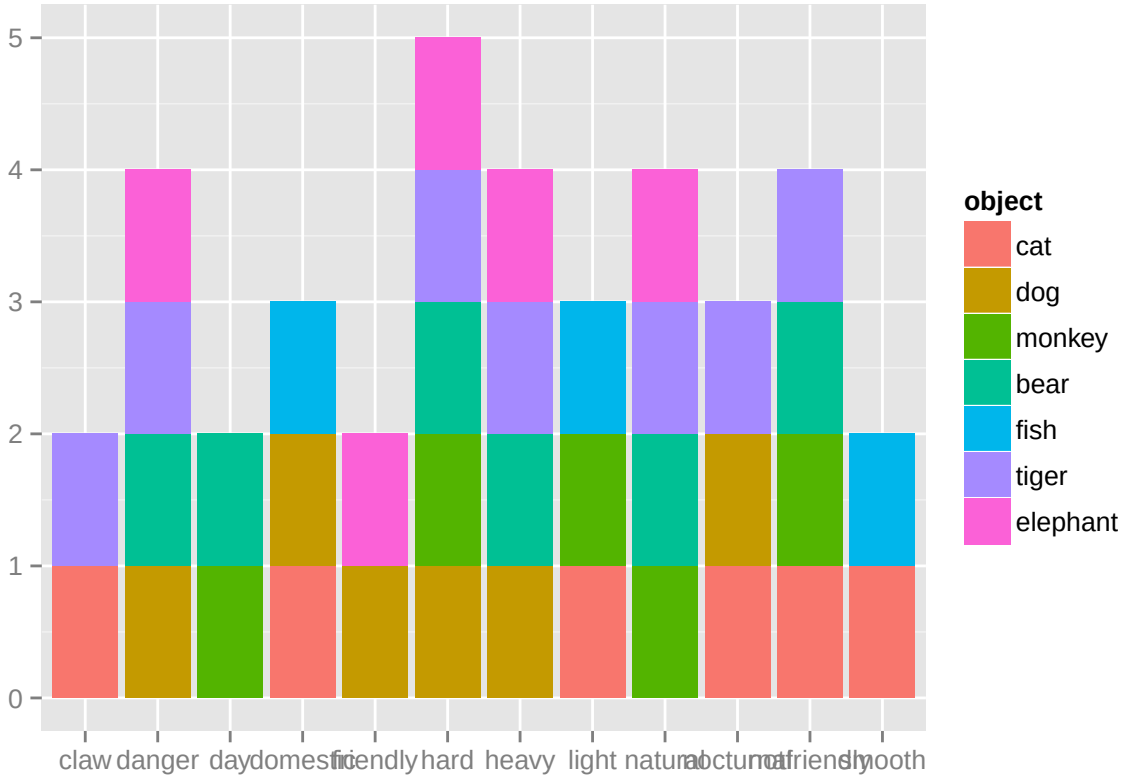
The tags are:

```
##  [1] "claw"        "danger"      "day"         "domestic"    "friendly"
##  [6] "hard"        "heavy"       "light"       "natural"     "nocturnal"
## [11] "notfriendly" "smooth"
```

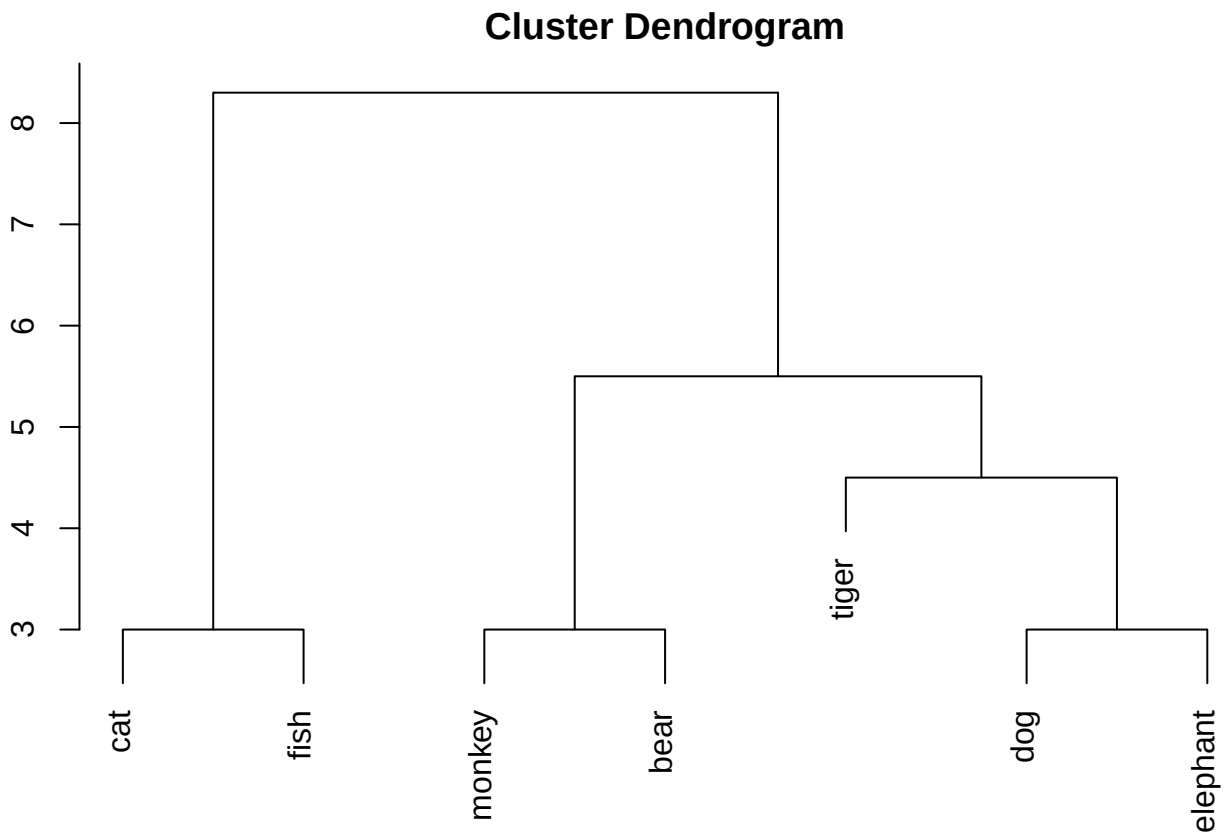
Visualizing objects versus tags



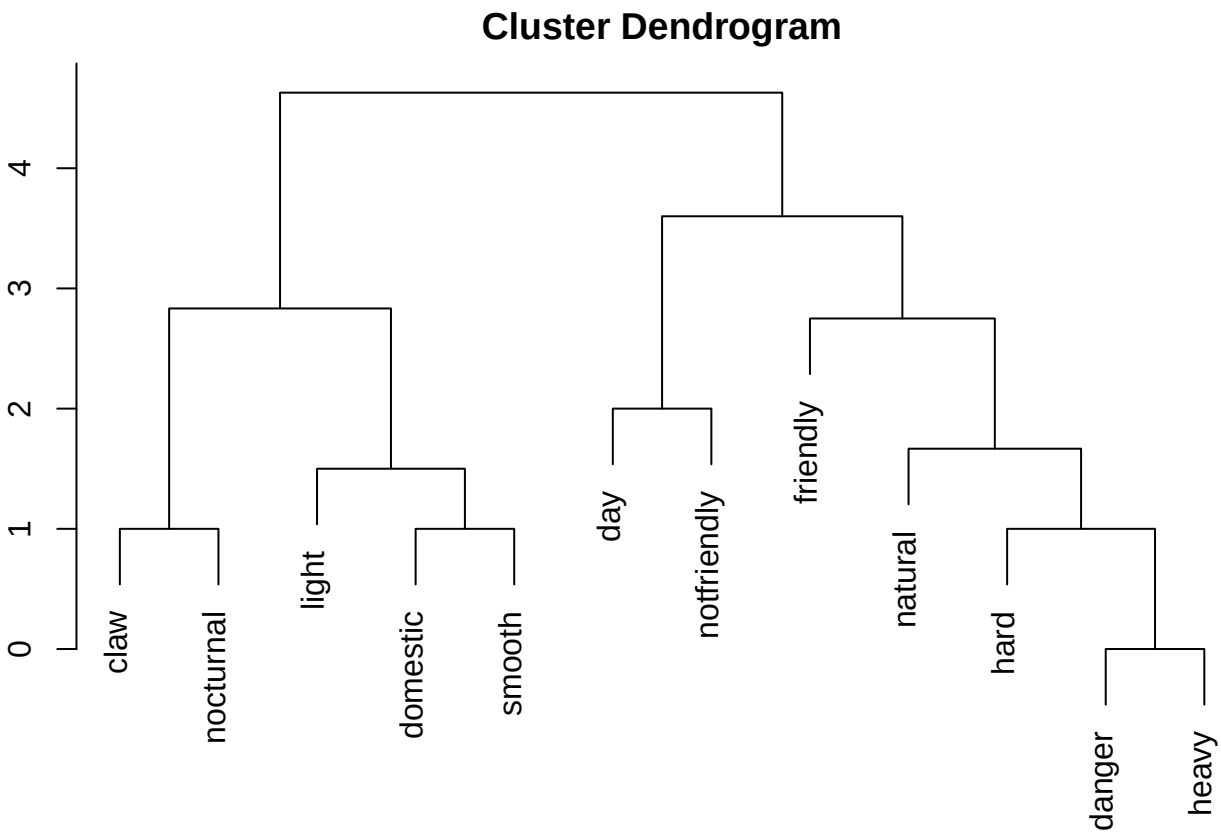
Visualizing tags versus objects



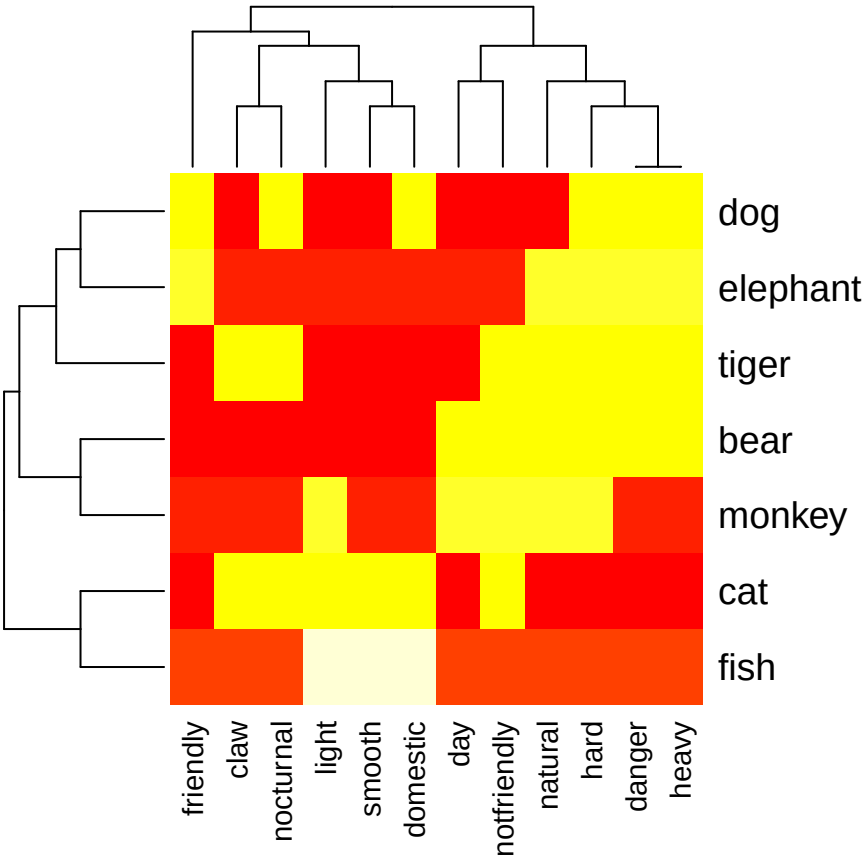
Hierarchical object clustering



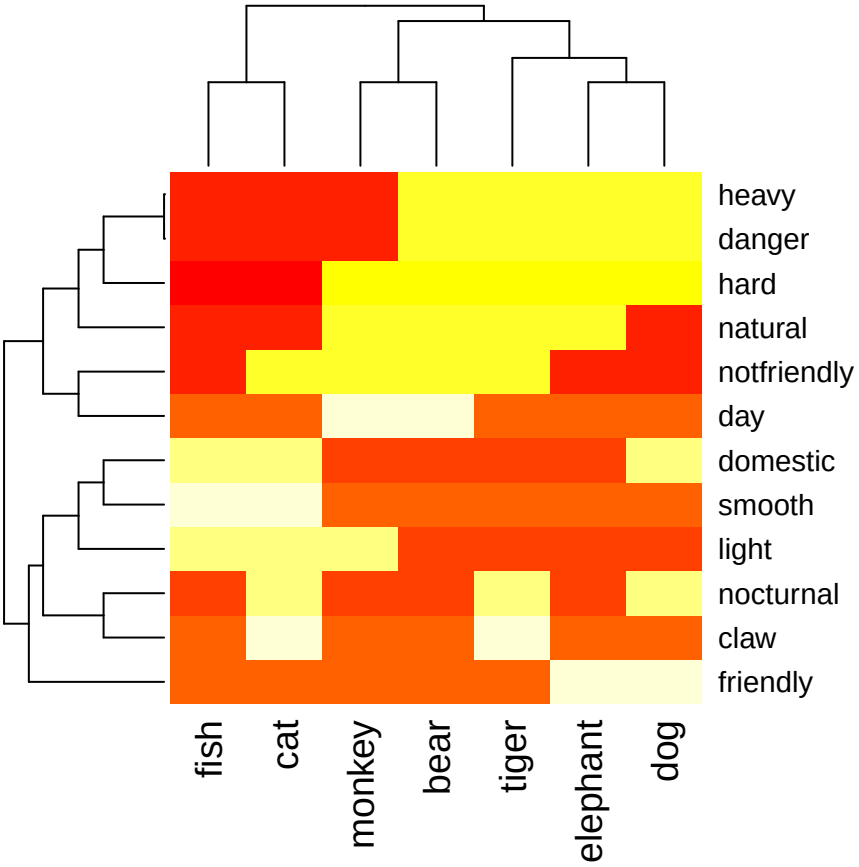
Hierarchical tag clustering



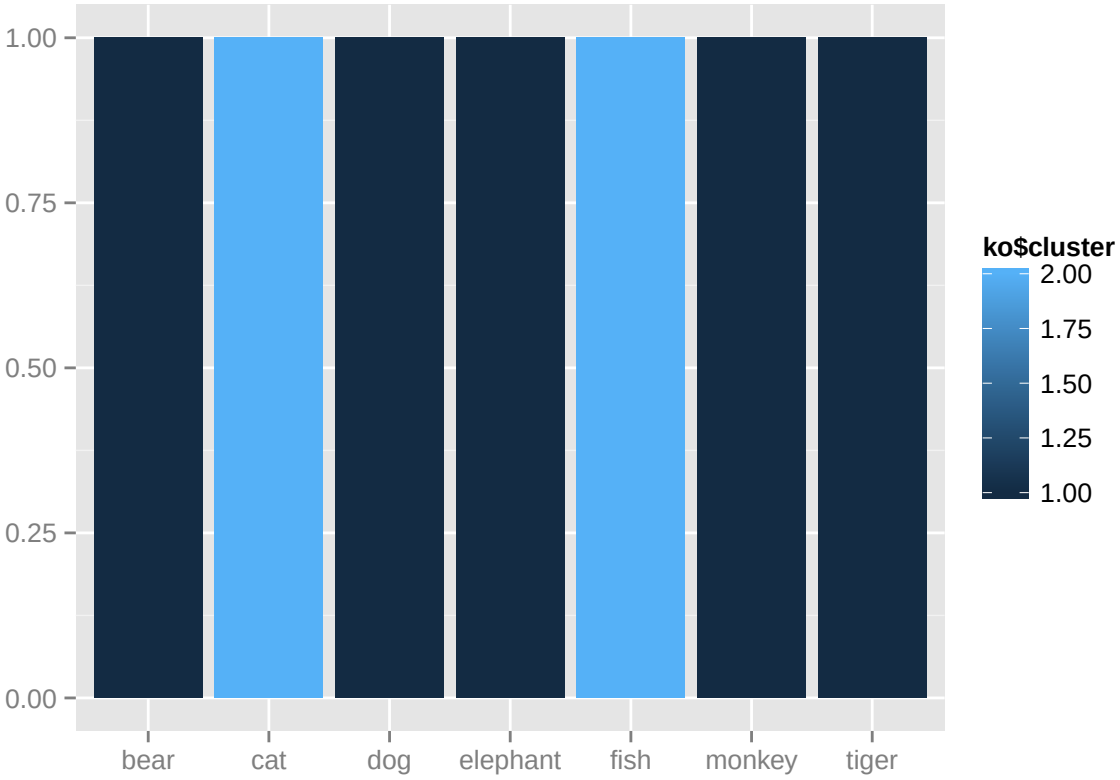
Heatmap of objectwise hierarchial clustering



Heatmap of tagwise hierarchial clustering

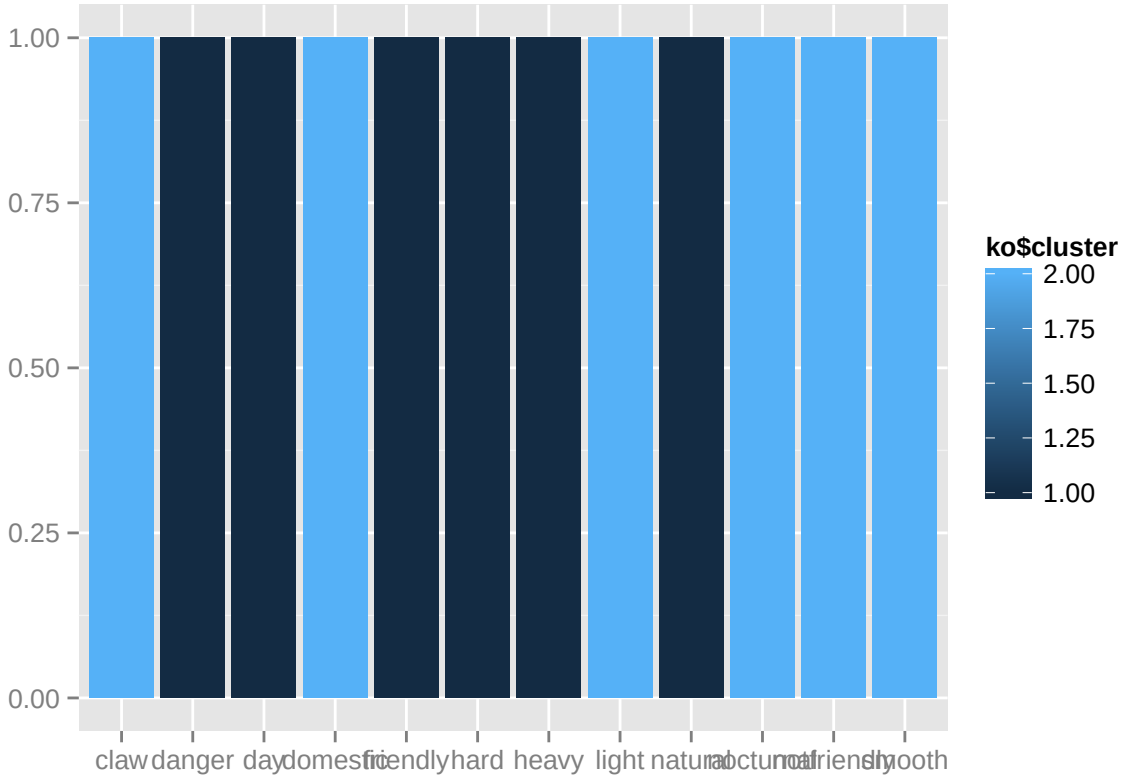


Clusters among objects (using kmeans)



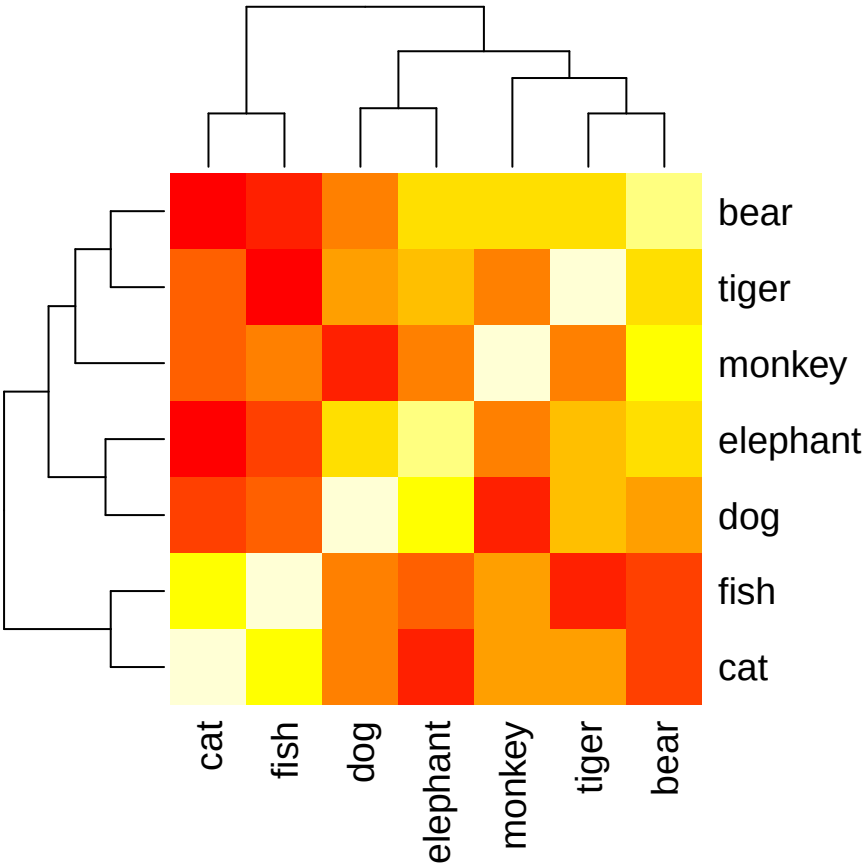

```
## The clusters are:

## $`1`
## [1] "dog"      "monkey"   "bear"     "tiger"    "elephant"
##
## $`2`
## [1] "cat"  "fish"
```

Clusters among tags (using kmeans)



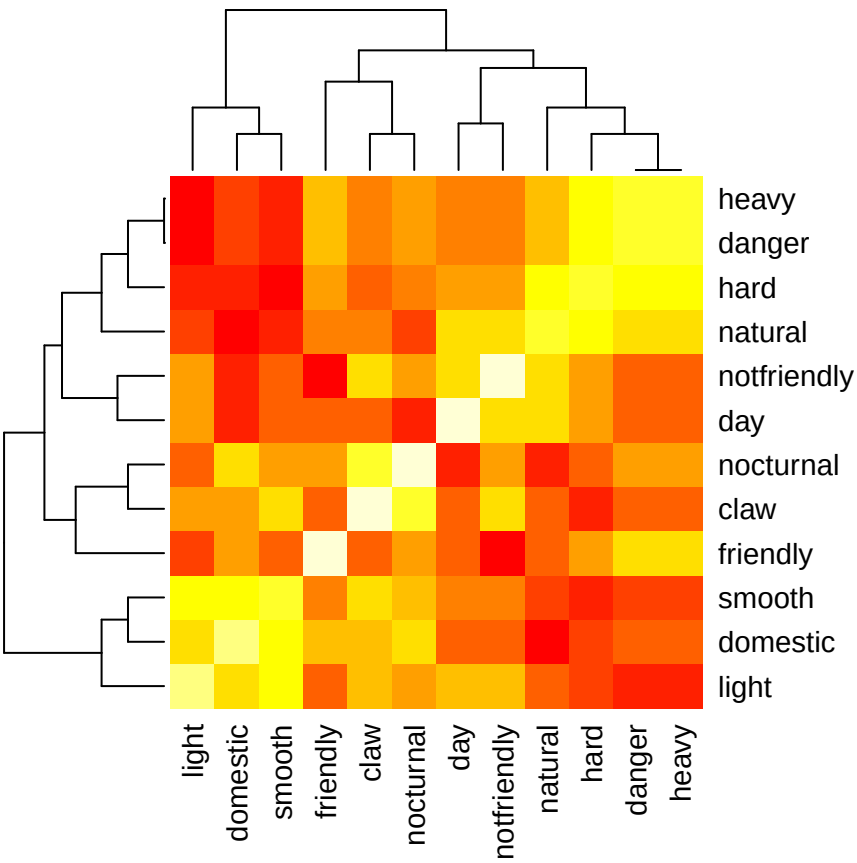

```
## The clusters are:

## $`1`
## [1] "danger"   "day"      "friendly" "hard"     "heavy"    "natural"
##
## $`2`
## [1] "claw"        "domestic"    "light"       "nocturnal"   "notfriendly"
## [6] "smooth"
```

Number of tags shared by objects




```
##          cat dog monkey bear fish tiger elephant
## cat       12   4      5    2    9     5        1
## dog        4  12      3    6    5     7        9
## monkey     5   3     12    9    6     6        6
## bear       2   6      9   12    3     9        9
## fish       9   5      6    3   12     2        4
## tiger      5   7      6    9    2    12        8
## elephant   1   9      6    9    4     8       12
```

Number of objects shared by tags




```
##             claw danger day domestic friendly hard heavy light natural
## claw           7      3   3        4        3    2     3     4       3
## danger         3      7   3        2        5    6     7     0       5
## day            3      3   7        2        3    4     3     4       5
## domestic       4      2   2        7        4    1     2     5       0
## friendly       3      5   3        4        7    4     5     2       3
## hard           2      6   4        1        4    7     6     1       6
## heavy          3      7   3        2        5    6     7     0       5
## light          4      0   4        5        2    1     0     7       2
## natural        3      5   5        0        3    6     5     2       7
## nocturnal      6      4   2        5        4    3     4     3       2
## notfriendly    5      3   5        2        1    4     3     4       5
## smooth         5      1   3        6        3    0     1     6       1
##             nocturnal notfriendly smooth
## claw                6           5      5
## danger              4           3      1
## day                 2           5      3
## domestic            5           2      6
## friendly            4           1      3
## hard                3           4      0
## heavy               4           3      1
## light               3           4      6
```

```
## natural            2          5      1
## nocturnal          7          4      4
## notfriendly        4          7      3
## smooth             4          3      7
```

The document with visualizations was generated using the code from the project **Analyzing tagged data** (https://github.com/talegari/analyzing-tagged-data)
