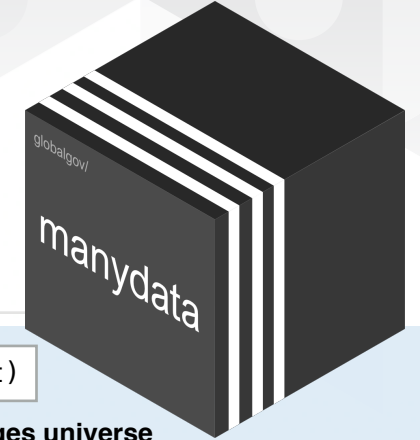


Explore the data with manydata: : CHEAT SHEET

manydata is the portal through which the data stored in the 'many' universe of packages can be easily accessed.

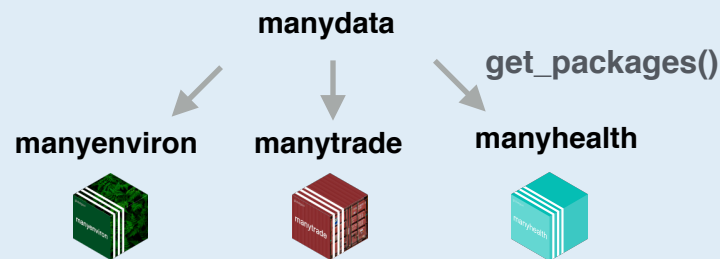
Using the functions in **manydata**, users can call, consolidate, and compare different datasets and databases across issue-domains of global governance.



1) Call

```
get_packages(manypackage)
```

get_packages() is a quick and easy way to access and download data from the many packages universe. The function allows users to interactively select which branch (main/develop).



```
data_source(manypackage, database, dataset)
```

Database from many packages universe

| Dataset | Reference |
|-----------|---|
| Dataset_A | "Name Surname of authors, year, paper title using the data, publisher, place" |
| Dataset_B | "Name Surname of authors, year, paper title using the data, publisher, place" |
| Dataset_C | "Name Surname of authors, year, paper title using the data, publisher, place" |

```
retrieve_bilaterals(dataset)
```

| manyID | stateID1 | stateID2 | Title | Beg |
|--------------|----------|----------|-------|------------|
| TFJXKC_1999O | SIN | BRA | B | 1999-02-28 |
| BALTTT_1966O | NZL | MEX | T | 1966-05-08 |

| manyID | Title | Beg |
|--------------|-------|------------|
| TFJXKC_1999O | B | 1999-02-28 |
| ECE_2003A | M | 2003-07-13 |
| AGEJKL_1947O | A | 1947-09-19 |
| BALTTT_1966O | T | 1966-05-08 |

```
retrieve_multilaterals(dataset)
```

| manyID | Title | Beg |
|--------------|-------|------------|
| ECE_2003A | M | 2003-07-13 |
| AGEJKL_1947O | A | 1947-09-19 |

retrieve_bilaterals() and **retrieve_multilaterals()** extract bilateral or multilateral treaties from a dataset of treaties.

```
data_contrast(manypackage, database, dataset)
```

Database

| Dataset | Unique ID | Missing data | Rows | Columns | Beg | End | URL |
|-----------|-----------|--------------|------|---------|------------|------------|---|
| Dataset_A | 0 | 3% | 3666 | 8 | 1351-08-01 | NA | https://sourceidatasetA.com |
| Dataset_B | 2765 | 13% | 2765 | 10 | 1351-08-01 | 2020-09-12 | https://sourcedatasetB.com |
| Dataset_C | 2390 | 19% | 2390 | 9 | 1868-10-17 | 9999-12-31 | https://sourcedatasetC.com |

2) Consolidate

consolidate() allows users to produce a dataset from different datasets within the database. It resolves conflicts in data using the 'resolve' argument, which allows users to specify the value they would like to retain in the dataset.

```
consolidate(database, rows, cols, resolve, key)
```

Database from a package in the many packages universe

For rows and cols, select either any (all units are retained), or every (only those observations appearing in all parent datasets)

Specify value using 'resolve'

| manyID | DatasetA\$Beg | DatasetB\$Beg | DatasetC\$Beg | DatasetD\$Beg |
|--------------|---------------|---------------|---------------|---------------|
| ABCEFG_1995O | 1995-01-01 | 1995-03-04 | 1995-12-07 | NA |

resolve = min

| manyID | Beg |
|--------------|------------|
| ABCEFG_1995O | 1995-01-01 |

resolve = median

| manyID | Beg |
|--------------|------------|
| ABCEFG_1995O | 1995-03-04 |

resolve = coalesce

| manyID | Beg |
|--------------|------------|
| ABCEFG_1995O | 1995-01-01 |

resolve = max

| manyID | Beg |
|--------------|------------|
| ABCEFG_1995O | 1995-12-07 |

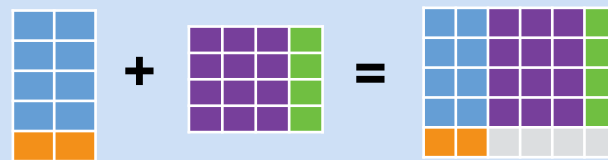
resolve = mean

| manyID | Beg |
|--------------|------------|
| ABCEFG_1995O | 1995-05-15 |

resolve = random

| manyID | Beg |
|--------------|------------|
| ABCEFG_1995O | 1995-03-04 |

if rows and cols = any



if rows and cols = every



if rows = any & cols = every



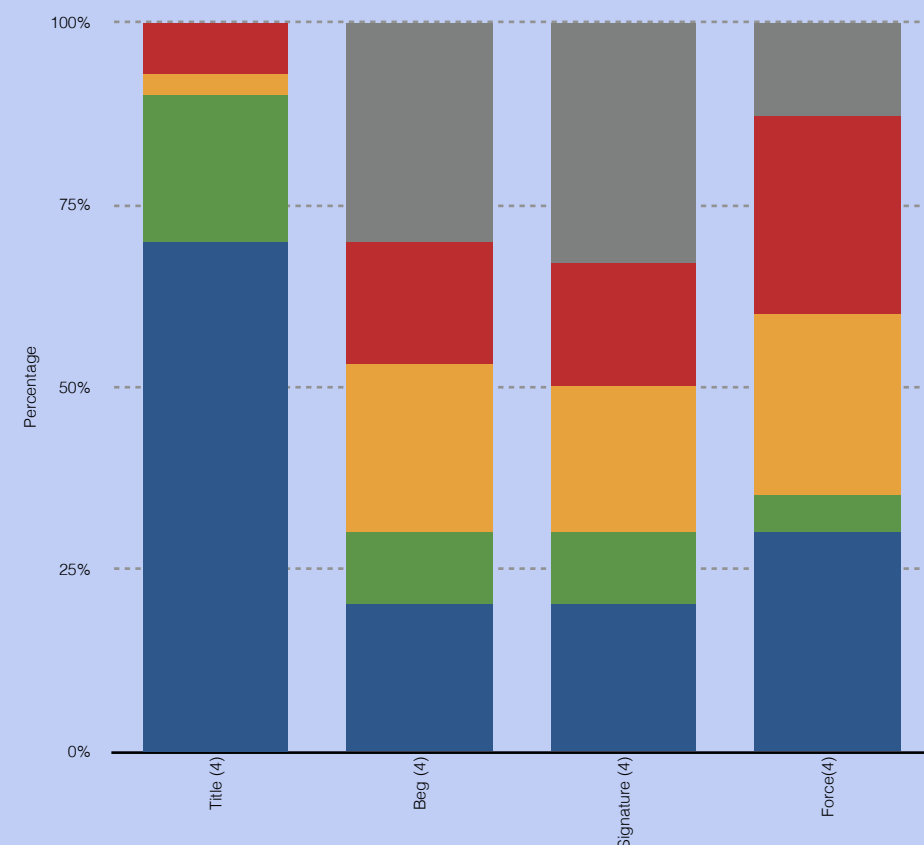
Use **favour()** to specify the reference dataset for the first NA value before consolidating.

3) Compare

```
db_plot(database, dataset, key, variable, category)  
db_comp(database, dataset, key, variable, category)
```

db_plot() visualises the profile of variables across all datasets in a database (eg. agreements).

db_comp() returns a tibble that compares the variables across all datasets in the database according to the specified category/categories.



Categories

'confirmed': same across all datasets

'majority': present in most datasets

'unique': only in one dataset

'conflict': different observations in each dataset

'missing': no observations