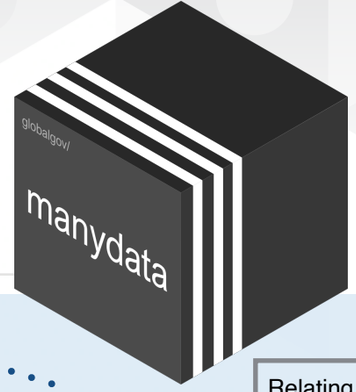
Explore the data with manydata: : CHEAT SHEET

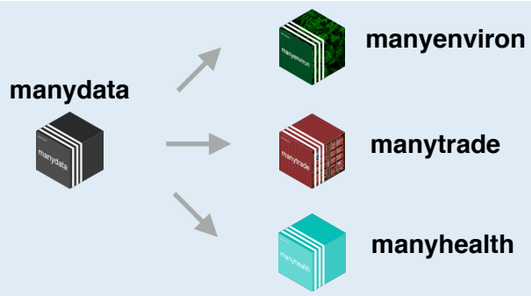


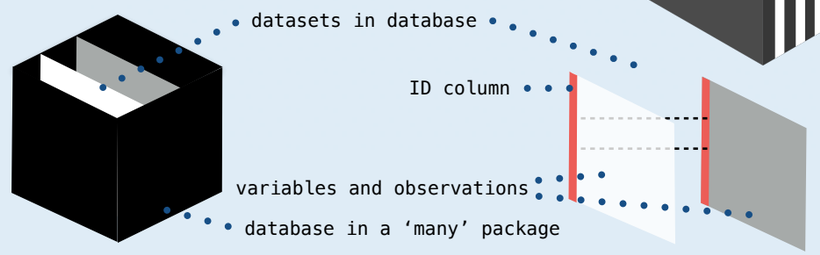
manydata is the portal to packages that include many datasets to different domains of global governance. Using the functions in **manydata,** users can call, compare, and consolidate different datasets and databases across various domains of global governance.

1) Call

```
call_packages(manypackage, develop)
```

call_packages() is a quick and easy way to access and install 'many' packages. The function allows users to interactively select the 'develop' branch using the 'develop' argument. Running the function without an argument returns the full list of 'many' packages.





Relating datasets: potentially overlapping IDs, overlapping rows/ observations, and overlapping columns/ variables

```
call_treaties(dataset, treaty_type, variable, actor)
```

Use 'treaty_type', 'variable', and 'actor' arguments to specify the treaties (bilateral or multilateral), variables, or actors to extract the relevant observations in the dataset.

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

```
treaty_type = "bilateral",
variable = c("Title", "Begin")
```

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

```
call_sources(manypackage, database,
dataset, open_script, open_codebook)
```

call_sources() returns a tibble of sources ('Source', 'URL') and renamed variables ('Mapping') for each dataset in a database of a 'many' package.

Dataset	Source	URL	Mapping
Dataset_A	"Name Surname of authors, year, paper title using the data, publisher, place"	http…	from - to | Label - Title…
Dataset_B	"Name Surname of authors, year, paper title using the data, publisher, place"	http…	from - to | Treaty - Title…
Dataset_C	"Name Surname of authors, year, paper title using the data, publisher, place"	http…	from - to | Treaty - Title…

2) Compare

The '**compare_**' family of functions facilitates the comparison of observations within and across datasets in a database by various conditions:
- overlapping observations
- missing observations
- in categories ('confirmed', 'majority', 'unique', 'missing', and 'conflict')

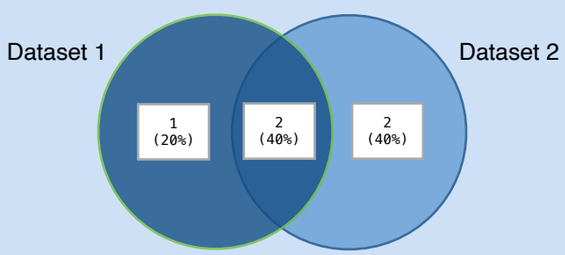
Observations are matched by a 'key', usually an 'ID' variable like 'manyID' to facilitate comparison. Each unique state or treaty has a unique stateID or manyID that is the same across datasets. Results of comparisons are returned in a tibble. Each of these comparisons can be visualised using corresponding '**plot_**' functions.

```
compare_overlap(database, dataset, key, variable, category)
plot_overlap(database, dataset, key, variable, category)
```

Dataset 1	
manyID	Beg
ABC	1995
ABC	1995
ABD	2001
BDF	2002

Dataset 2	
manyID	Beg
ABC	1995
ABD	2001
BBC	1997
CFD	2003
CFD	2003
CFD	2003

Dataset	`Overlapping Observations`
Dataset 1	1
Dataset 2	2
Dataset1 .. Dataset 2	2




```
compare_data(database, dataset)
```

compare_data() lists the observations, variables, and earliest and latest dates in each dataset in a database.

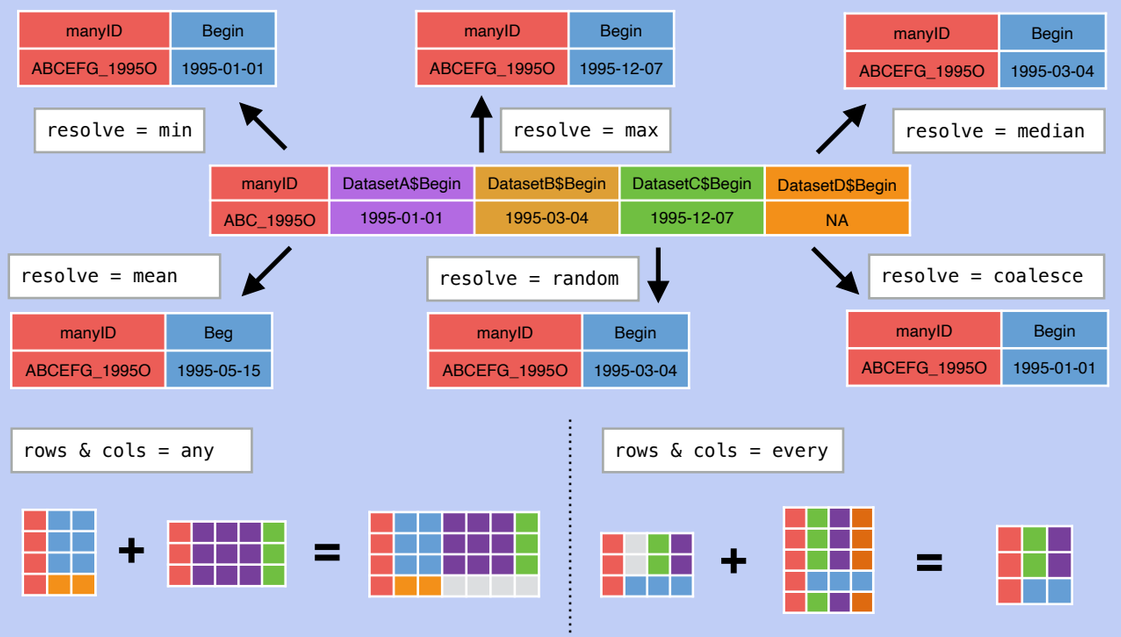
Dataset	Observations	Variables	Earliest_Date	Latest_Date
Dataset_A	70	15	1873-01-01	2020-12-20
Dataset_B	53	7	1986-03-05	2020-12-20
Dataset_C	96	5	1945-01-01	2022-01-01

3) Consolidate

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

consolidate() allows users to produce a single dataset from different datasets within the database by matching rows and resolving conflicts in data.

Databases are consolidated using '**key**', an identifying variable for each row (eg. manyID), to match rows across datasets. Select a method (min, max, median, mean, coalesce, random) to **resolve** conflicts among matched observations across datasets when consolidating.
For '**rows**' and '**cols**', enter either 'any' to retain all rows/cols or 'every' to retain only rows/cols that appear in all datasets that are being consolidated.



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