MISADVENTURES IN BIODIVERSITY DATA

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Biodiversity Data...Standards

recordedBy: "J. W. Woodhead",
country: "Australia",
decimalLatitude: "-42",
decimalLongitude: "147",
scientificName: "Vombatus ursinus hirsutus",
basisOfRecord: "PreservedSpecimen",
ocurrenceID: "8864ef77-15ff-4ea8-bd97-f8bc396d7c8f",
catalogNumber: "49085",
collectionID: "Mammals",
year: "1939"
Diversity...

...is great!

But maybe not for data-structure.

...How to build + maintain ONE SYSTEM for DIVERSE DATA?

© W B Paley - Relationships among Scientific Paradigms

HomeStarRunner.com / sbemail84.html
Database structure

https://github.com/fieldmuseum/Collections-Scripts/

+ ShinySchemaVis
+ EMu database schema

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collectionID: "Mammals",
year: "1939"
```
schemaB2 <- dplyr::count(schemaB, source, target)
g <- graph.data.frame(schemaB2, directed = FALSE)
schemaMatrix <- get.adjacency(g, attr = "n", sparse = FALSE)
```

**EMu Schema**

**text file**

**prep-script**

tidyr, zoo

**networkD3::chordNetwork()**

**matrix**

igraph::

graph.data.frame()
**Registry / Admin Patterns**

- `sunburstR::sunburst()`

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**EMu Registry**

CSV

```
Key1   Key2    Key3    Key4     Key5
Group  Default Table  Default  Operations
Group  Default Table  ecatalog Tabs
Group  Admin Table  eevents  Tabs
Group  IZMgr Table  esites  Report
User   emu    Table  esites  Tabs
```

---

** prep-script dplyr **

```
sunburst(regD3, count = TRUE)
```
Light at the end of a tunnel…

...Or an oncoming train?
Cited Things:

- networkD3
- sunburstR
- github.com/fieldmuseum/Collections-Scripts
  - ShinySchemaVis
  - ShinyRegVis
- Darwin Core
  TDWG - https://dwc.tdwg.org/
- Science Map / W. B. Paley
- Children’s book / Homestar Runner
- Screamy lamb / twitter.com/screaminglxmb
- Charlton Heston / Soylent Green

Acknowledgements:

FMNH
Technology Department

Sharan Grant
Janeen Jones
Pete Herbst
Rob Zschernitz

Action Department

Tomomi Suwa