Social Group Interactions and Mating Patterns of the Cayo Santiago Rhesus Macaque Colony: A Retrospective Approach

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CSViewer for Analysts Version 1.1

Access to the valuable data from the CS Rhesus Colony hosted on the "Monkey Island" off Puerto Rico for over 85 years. Analytics and visualization support also provided.

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JFreeChart

joinery API

Microsoft Access

Microsoft SQL Server

CS Database

Matrilineal and Patrilineal Family Trees Derived …

neo4j

… and Visualized with Neo4j Graph DB and Java JTree

Censors 2020 & 2013

Dam & Sire DNA tracing available starting 1975

Skeletal sets curated at CPRC-Museum

Cayo Santiago Colony – Factsheet

Established	1938
Founding Mothers	77
Headcount in DB	10949 (by 2020 census)
Pedigree	(Up to) 12
Animal with Both Parents known	4805
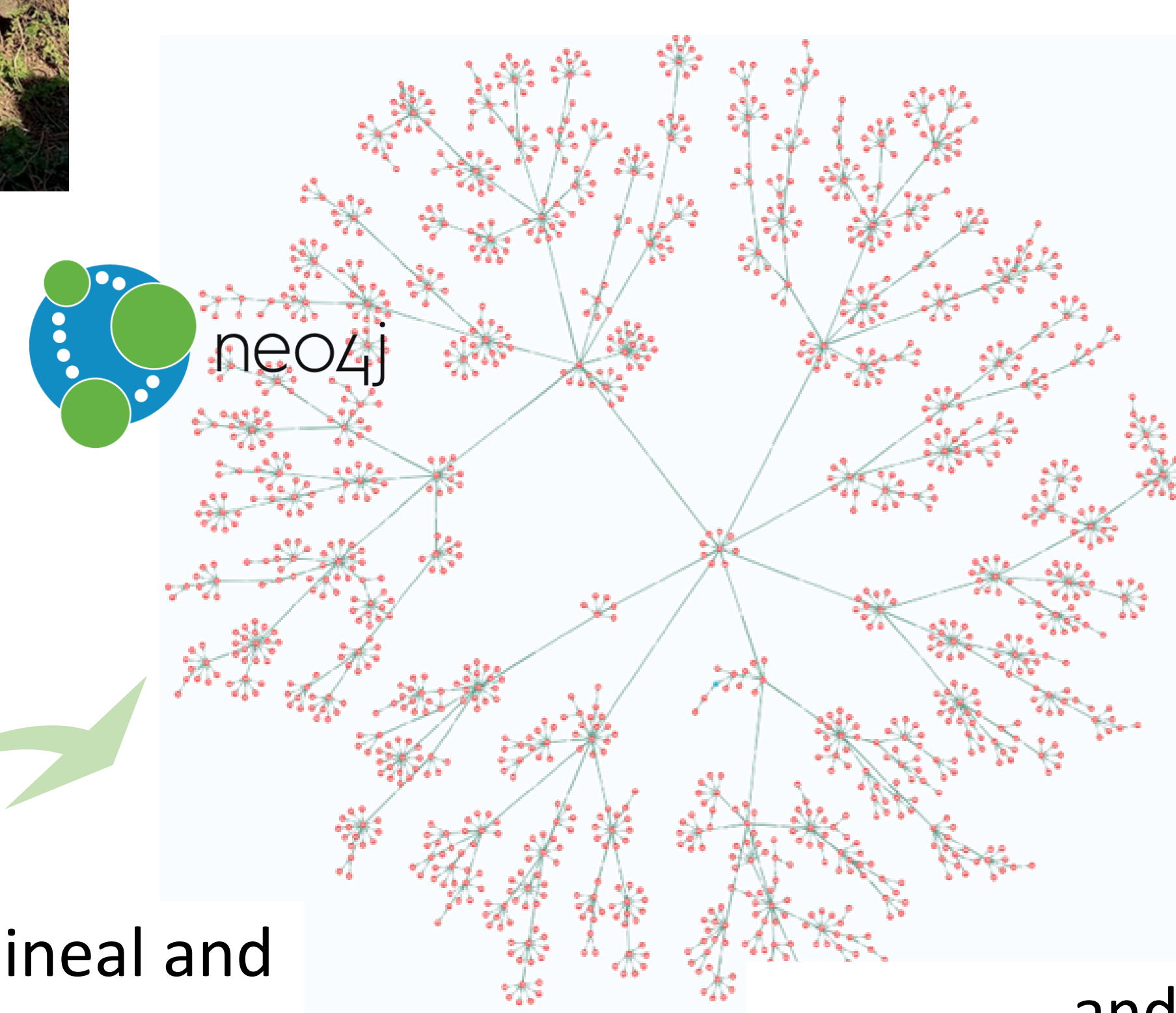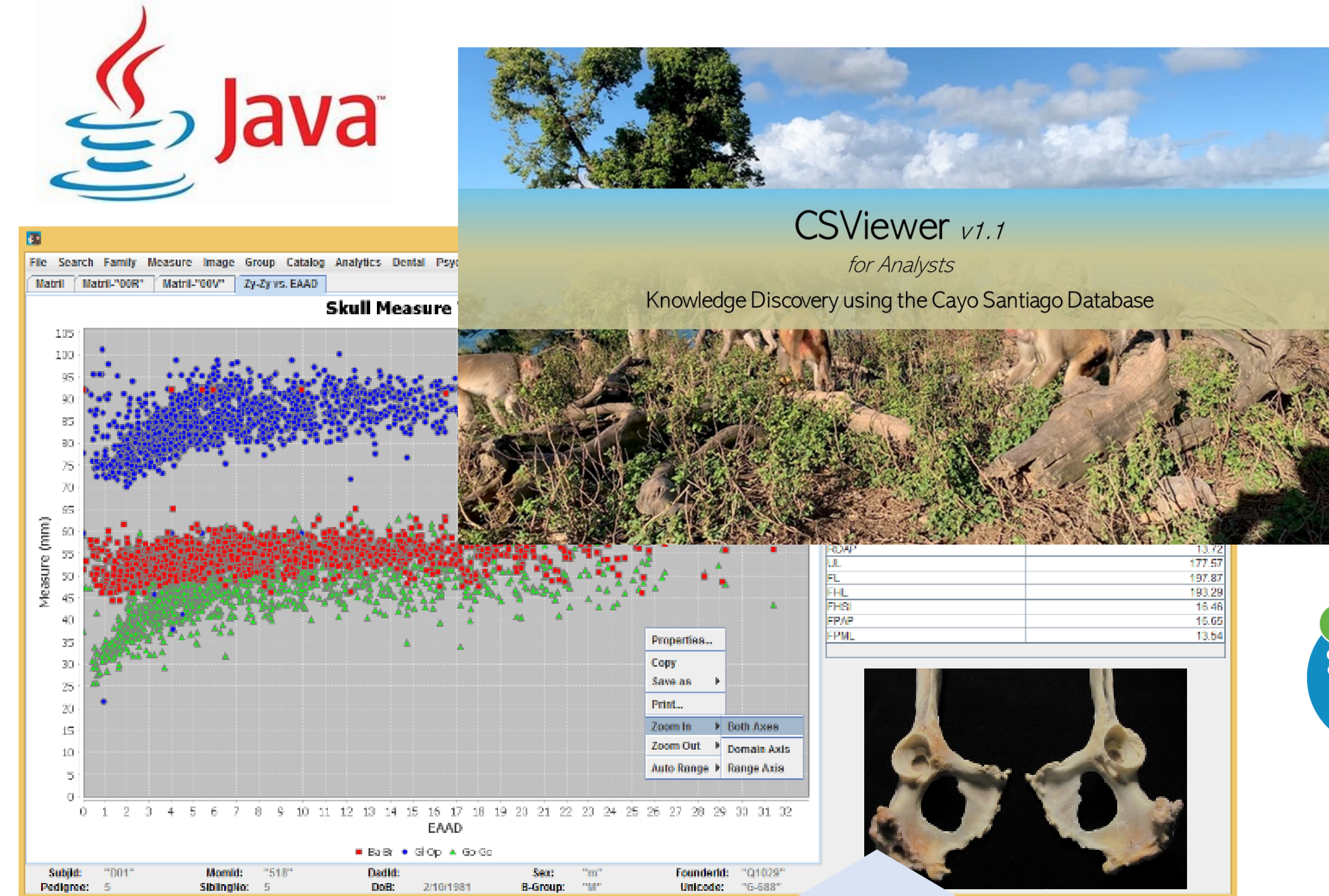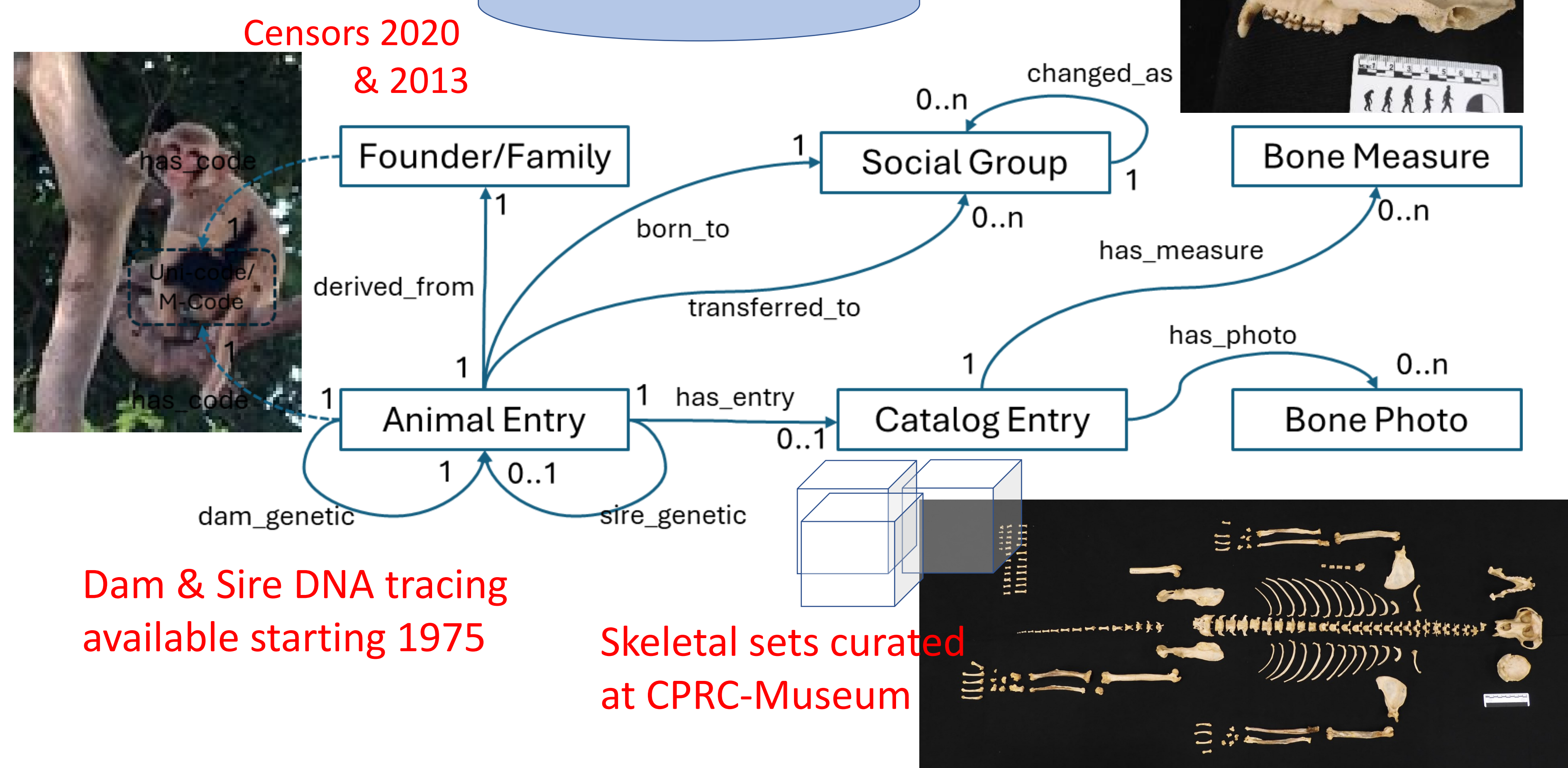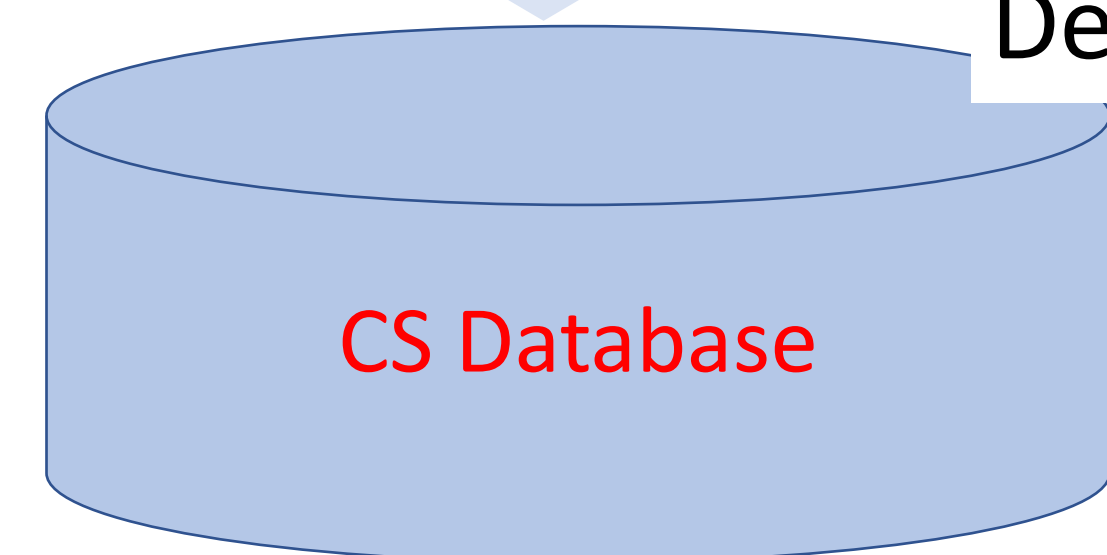
Social group evolution patterns
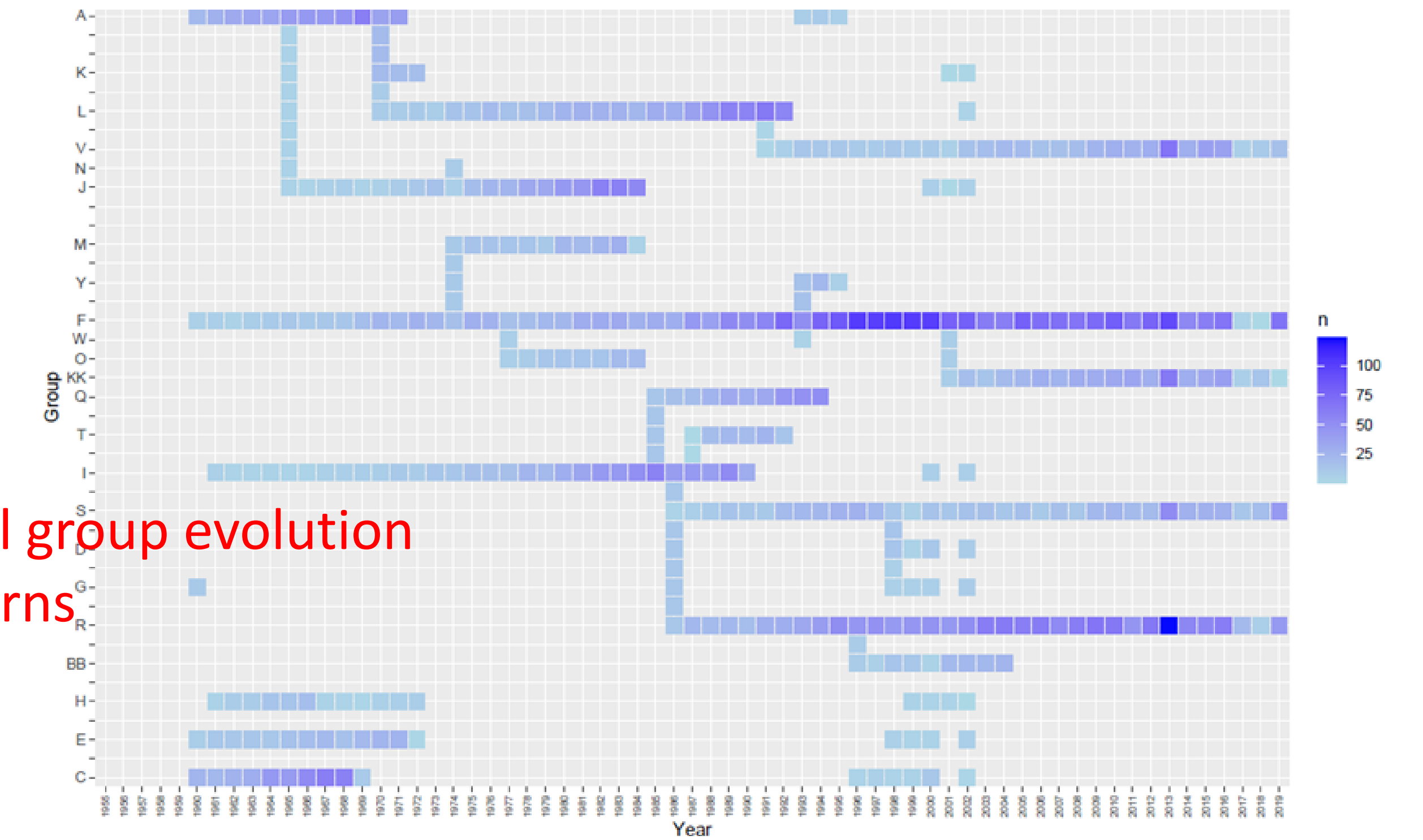
Group Interactions visualized using Gephi

Gephi
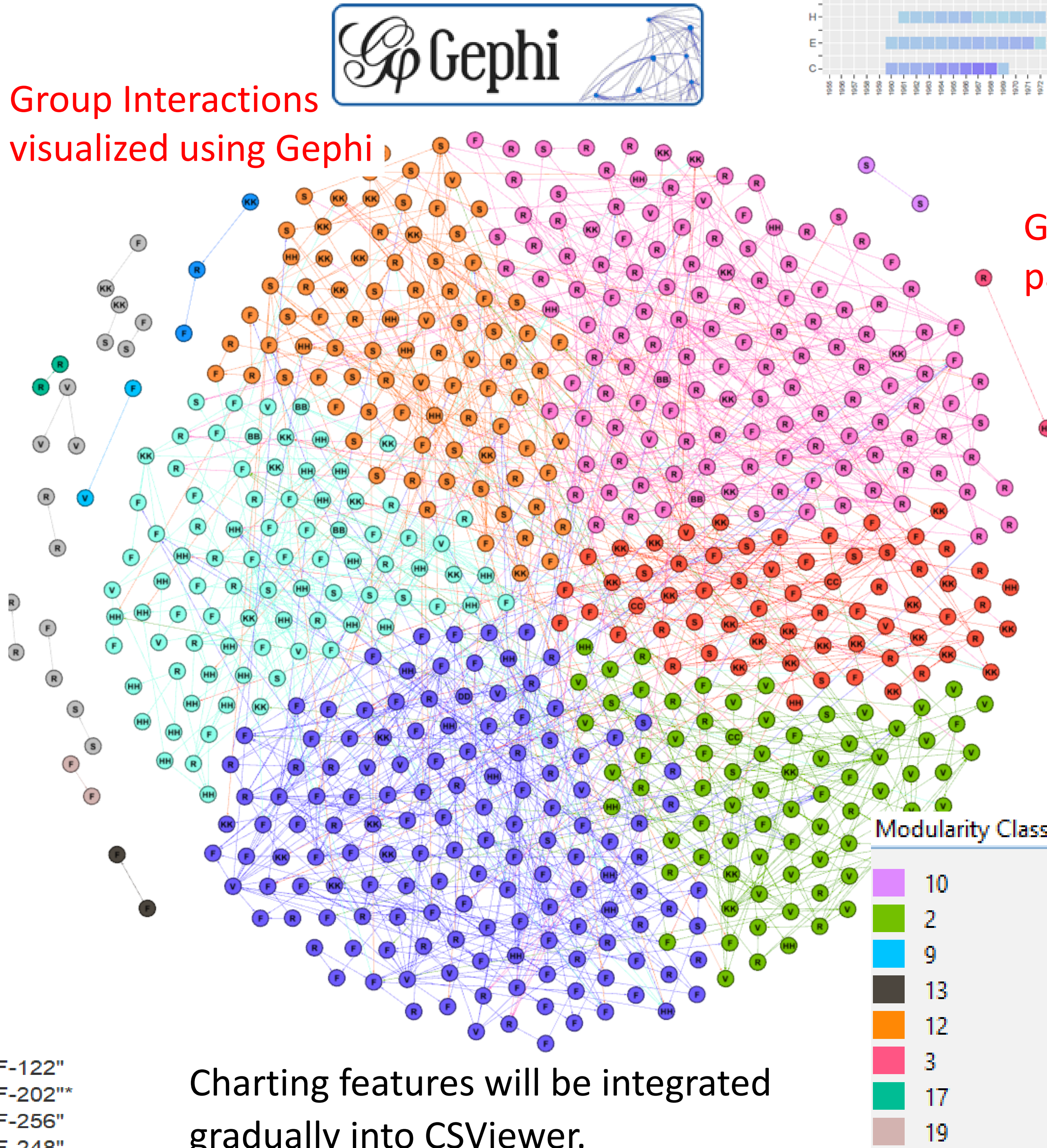
Group transfer patterns

R Programming

CS Patril Trees
- "F-116"
- "B-489"
- "B-838"
- "B-837"
- "B-939"
  - "D-7"
  - "E-6"
  - "E-6"
    - "F-122"
    - "F-202"
    - "F-256"
    - "F-248"
      - "C-255"
      - "A-165"
        - "C-464"
        - "B-116"
        - "C-908"
        - "A-679"
        - "B-570"
          - "E-333"
          - "D-058"
          - "C-197"
          - "E-899"
        - "A-253"
        - "A-266"
        - "C-059"
        - "D-393"
        - "C-962"
          - "D-516"

Modularity Class

10	(22.58%)
2	(21.77%)
9	(13.87%)
13	(13.87%)
12	(12.42%)
3	(10.32%)
17	(0.48%)
19	(0.48%)
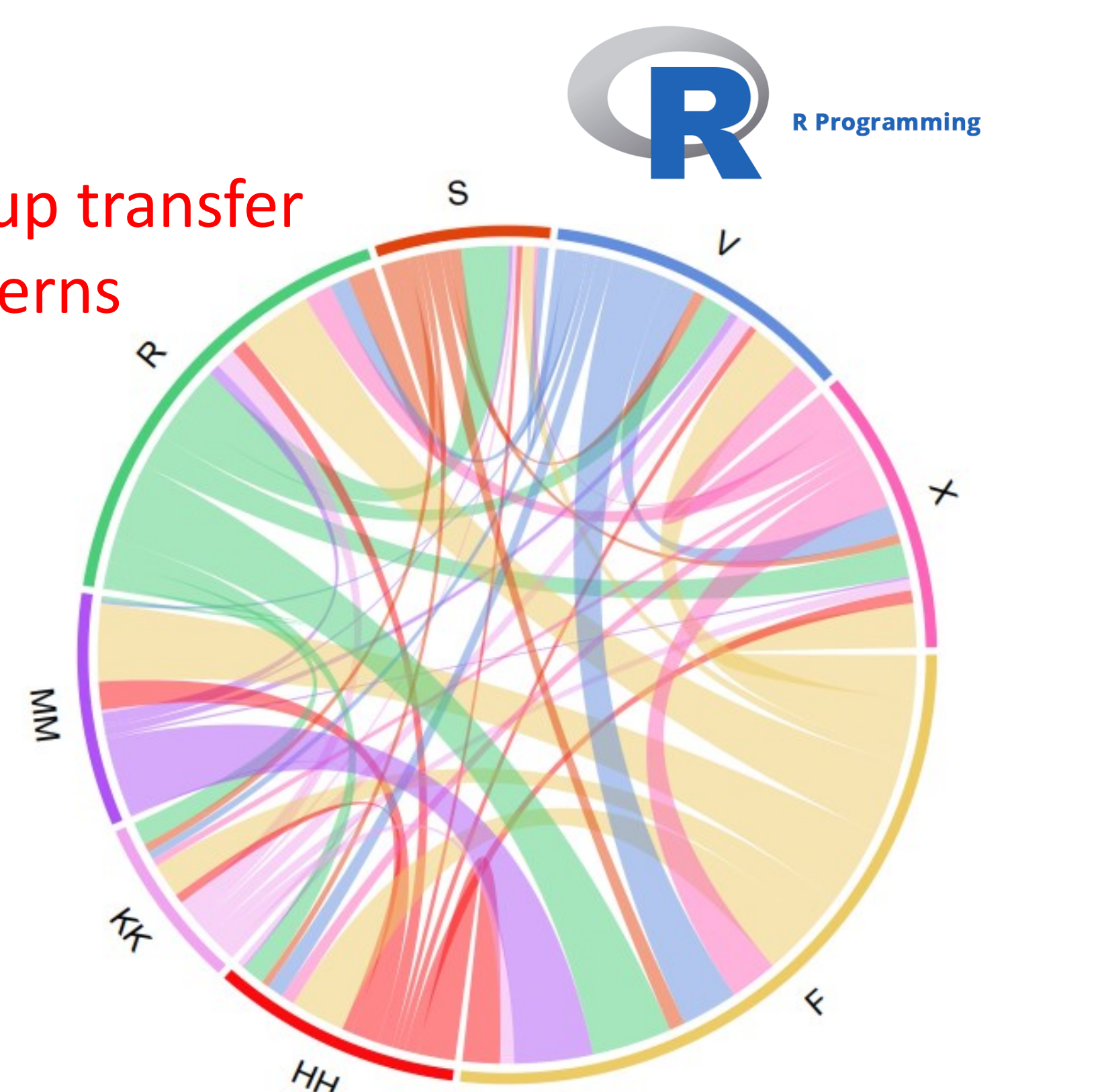
Charting features will be integrated gradually into CSViewer.

Cluster profiles

Cluster#	Grp1	%				
10	F	74.7%				
2	R	80.5%				
9	HH	44.6%	F	32.1%		
13	S	38.9%	F	24.1%	R	20.4%
12	V	79.2%				
3	KK	48.6%	F	35.1%		

Founder/Family

Social Group

Bone Measure

changed_as

0..n

born_to

transferred_to

has_measure

Animal Entry

Catalog Entry

has_photo

Bone Photo

has_entry

derived_from

dam_genetic

sire_genetic

Contacts

For general inquires:
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Qian Wang (qian.wang@tamu.edu).
For CS Viewer (v1.1) user support: Cooper T. Novak (cooper.Thomas.novak@live.mercer.edu)

About CS Viewer

CSViewer
Version 0.0.0
Developed by Dr. Martin Q. Zhao and his team at Mercer University.
This project is supported under a NSF grant, with data collected by Dr. Qian Wang and his team at TAMU from CPRC. PR. The latter is supported through grants from NIH.

Funded by:

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