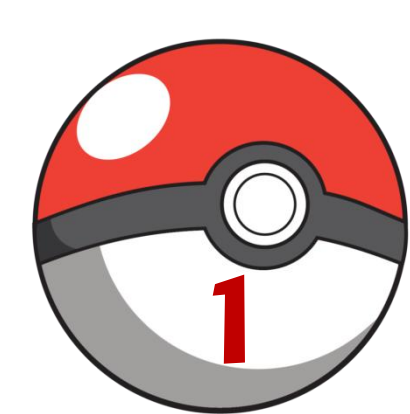# POKÉMON™

Freie Universität Berlin

Network Analysis: Uncloaking Hidden Interrelationships in Pokémon Origins

1 — Summary

- collecting data by watching „Pokémon Origins"
- collecting data by browsing the „Pokedex" website

- building two Pokémon networks for Pokémon battles:
  - one for Pokémons
  - one for Pokémon type classes

- examining both networks with new techniques:
  - statistical network science
  - visualisation

- key findings:
  - although there are 76 Pokémon in Pokémon Origins, less than 10 Pokémons play an important role
  - Pokémons can be divided into 3 classes
  - it exists an optimal Pokémon type class in Pokémon Origins

2 — Introduction

Research questions to Pokémon Origins:

1) Are some Pokémons more important than other Pokémons?

2) Do always the same Pokémons fight with each other?

3) Are the Pokémon type classes as well balanced as in the computer games?

The aim of the project is:

- to solve the research questions
- to get deeper insights into Pokémon Origins
- to develope further research questions

3 — Methodologies

Data collection by hand:
- watching in groups „Pokémon Origins"
- making notes
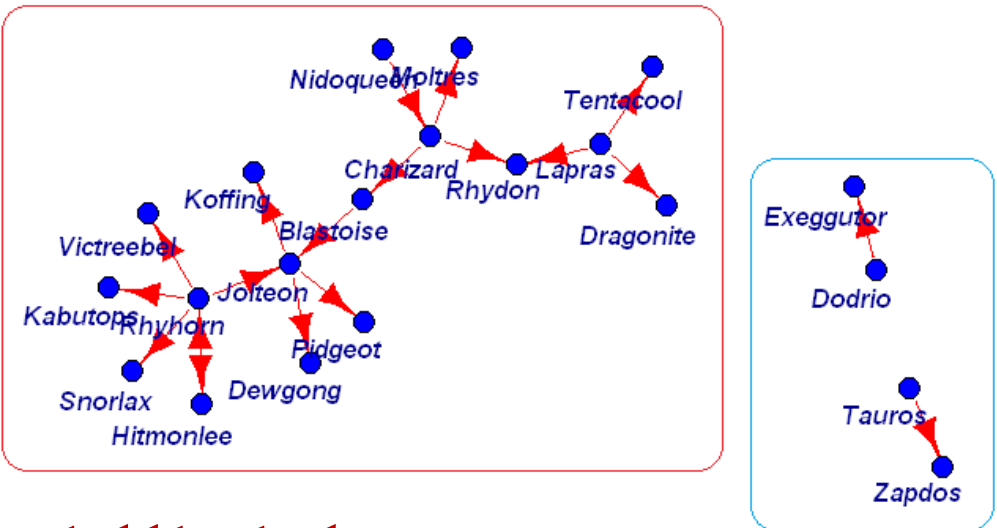- discussing the results
  (+ with Pokémon experts)

Data analysis
- data visualization with R
- network metrics in R
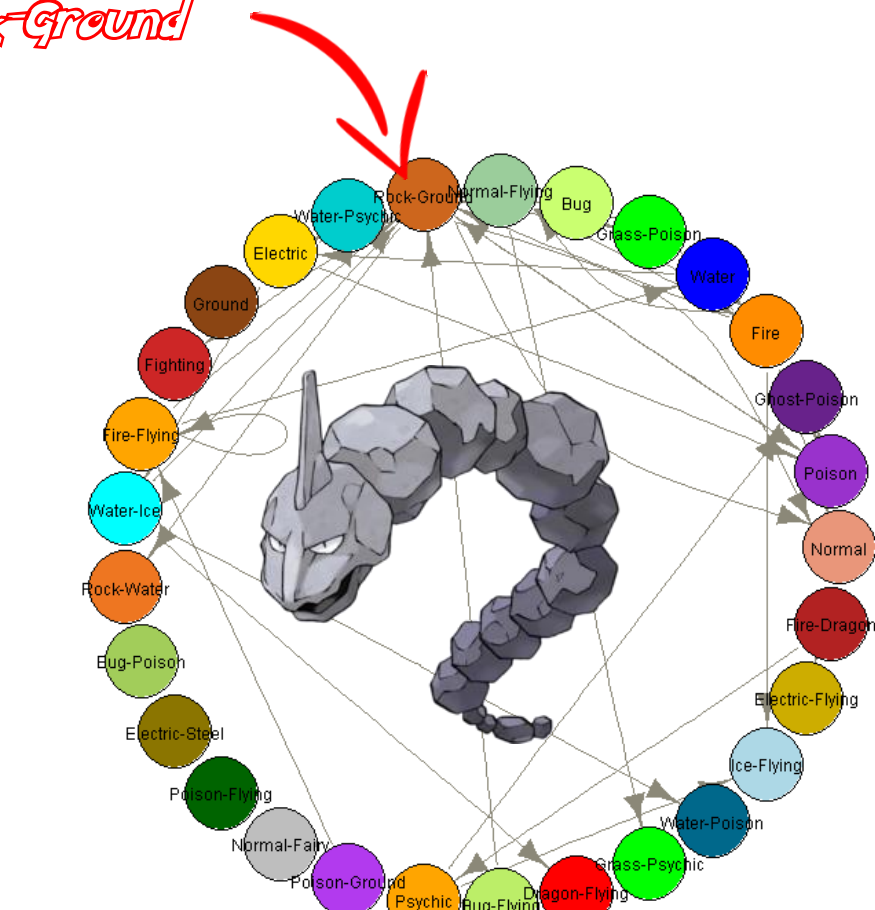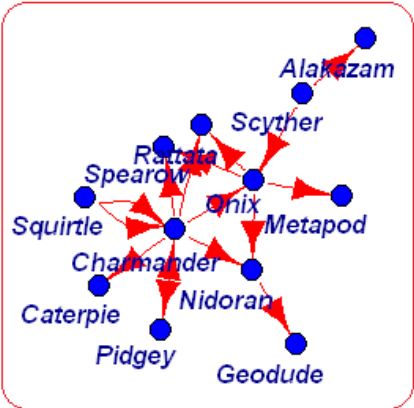- discrete disjoint timeline evaluation of the Pokémon battle graph

Episode 1   Episode 2   Episode 3   Episode 4
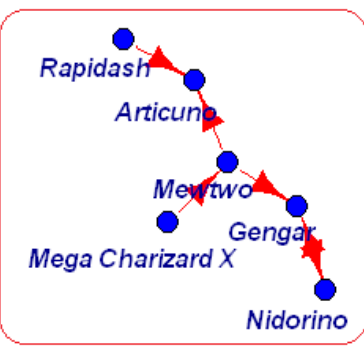
Episodes 1-4

4 — Results

Optimal Pokémon type: *Rock-Ground*

3 big battle events within all episodes!

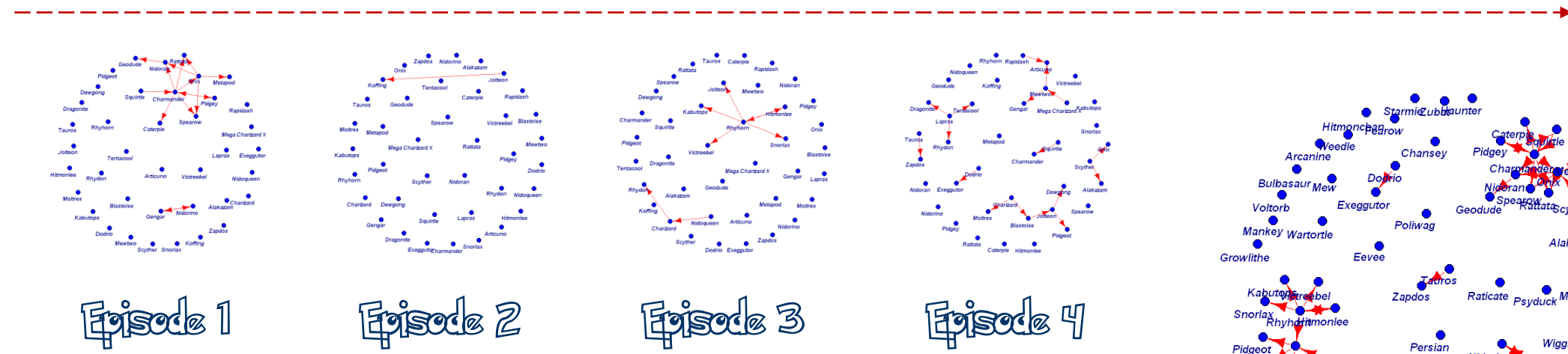3 battle clusters

The battle clusters grow around just a few good/strong Pokémons.

„X → Y" means „Y was defeated by X".

5 — Conclusion

There are 3 classes of Pokémons:
- good/strong Pokémons
- bad/weak Pokémons
- gadgetry Pokémons

The few good/strong Pokémons build the main battle clusters.

Unlike in the computer game exists in Pokémon Origins a superior type class of Pokémons: the Rock-Ground type class

6 — References

https://www.youtube.com/watch?v=k8_xSG2sack&list=PLw5cVqjmZhp8S87FZgD9_Z_49it8Zb_p3

http://pokemondb.net/pokedex