The making of a tbl_graph

From another graph data structure

- igraph
- network
- hclust
- dendrogram
- graph
- phylo
- data.tree

From a graph representation

- Adjacency matrices
- Adjacency lists
- Edge list
- Set memberships
- Incidence matrix

Making sense of the Marvel Universe

```
> glimpse(characters)
 Observations: 475
 Variables: 23
$ characters
                                             <chr> "Misty Knight", "Spider-Man", "Executioner", "Falcon", "Felix Blake", "Micro", "Happy Hogan", "Punisher", "Ali...
$ `characters-href` <chr> "http://marvelcinematicuniverse.wikia.com/wiki/Misty_Knight", "http://marvelcinematicuniverse.wikia.com/wiki/S...
$ type
                                             <chr> "Hero", "Hero", "Both", "Hero", "Both", "Hero", "Hero", "Hero", "Both", "Hero", "Hero", "Hero", "Hero", "Hero", "Hero"...
$ id
                                             <chr> "Misty_Knight", "Spider-Man", "Executioner", "Falcon", "Felix_Blake", "Micro", "Happy_Hogan", "Punisher", "Ali...
$ `Real Name`
                                             <chr> "Mercedes Kelly Knight", "Peter Benjamin Parker", "Skurge", "Samuel Thomas Wilson", "Felix Blake", "David Linu...
$ `Alias(es)`
                                             <list> [<"Misty Knight", "Detective", "Horton", "Miss Daisy", "Curandera", "Baby Girl", "Misguided Beat Cop", "Trick...</pre>
$ Species
                                             <chr> "Human (Cyborg)", "Human", "Asgardian", "Human", "Human", "Human", "Human", "Human", "Inhuman", "Human", "Human...
$ Citizenship
                                             <list> ["American", "American", "Asgardian", "American", "Ame
                                             <chr> "Female", "Male", "Male", "Male", "Male", "Male", "Male", "Female", "Female", "Female", "Male", "Male", "Male", "Male", "...
$ Gender
$ `Title(s)`
                                             <list> ["Detective", NA, <"Guardian of the Bifrost Bridge", "Executioner of Asgard">, NA, "Agent of S.H.I.E.L.D.", N...
$ Affiliation
                                             <list> ["NYPD", "Midtown School of Science and Technology", NA, <"United States Air Force", "Air National Guard", "A...</pre>
$ Status
                                             <chr> "Alive", "Alive", "Deceased", "Alive", "Alive", "Alive", "Alive", "Alive", "Deceased", "Deceased", "Alive", "Deceased", "Alive", "Deceased", "Alive", "Deceased", "Alive", "Deceased", "Deceased", "Alive", "Deceased", "Alive", "Deceased", "Alive", "Deceased", "Alive", "Deceased", "Alive", "Deceased", "Alive", "Deceased", "Deceased", "Alive", "Deceased", "Deceased", "Alive", "Deceased", "Deceased", "Alive", "Deceased", "Alive", "Deceased", "Deceased "Deceased", "Deceased "Deceased", "Deceased "Decea
$ `TV series`
                                             <list> [<"Luke Cage", "Iron Fist", "The Defenders">, "Iron Fist", NA, NA, "Agents of S.H.I.E.L.D.", <"Agents of S.H....</pre>
$ `Portrayed by`
                                             <list> ["Simone Missick", <"Tom Holland", "Max Favreau">, "Karl Urban", "Anthony Mackie", "Titus Welliver", "Ebon Mo...
                                             <chr> NA, "16", NA, "38", "56", NA, NA, NA, NA, "675", "46", "Over one thousand years", NA, NA, NA, "31", NA, NA, NA...
$ Age
$ `Date of Birth`
                                             <chr> NA, "2001", NA, "September 23, 1978", "March 12, 1961", NA, NA, "November 15th", NA, "1342", "January 7, 1971"...
$ Movie
                                             <list> [NA, <"Iron Man 2", "Ant-Man", "Captain America: Civil War", "Spider-Man: Homecoming", "Avengers: Infinity Wa...</pre>
$ `Web series`
                                             <list> [NA, "Watch the Game", NA, "WHiH Newsfront", NA, NA, "Watch the Game", NA, NA, NA, <"WHiH Newsfront", "Team T...</pre>
$ `Date of Death`
                                             <chr> NA, NA, "2017", NA, NA, NA, NA, NA, NA, "June 2016", "March 2017", NA, "2017", NA, "May 2009", NA, "June 2016", NA...
$ Family
                                             <list> [<"Rafael_Scarfe", "Claire_Temple", "Colleen_Wing", "Karen_Page", "Luke_Cage", "Jessica_Jones", "Daredevil", ...</pre>
$ Allies
$ Enemies
                                             <list> [<"Cottonmouth", "Diamondback", "Shades", "Black_Mariah", "Turk_Barrett", "Bakuto">, <"Captain_America", "Fal...</pre>
                                             <list> [<"Luke Cage", "Iron Fist", "The Defenders">, <"Iron Fist", "Iron Man 2", "Ant-Man", "Captain America: Civil ...</pre>
$ Appearance
```