

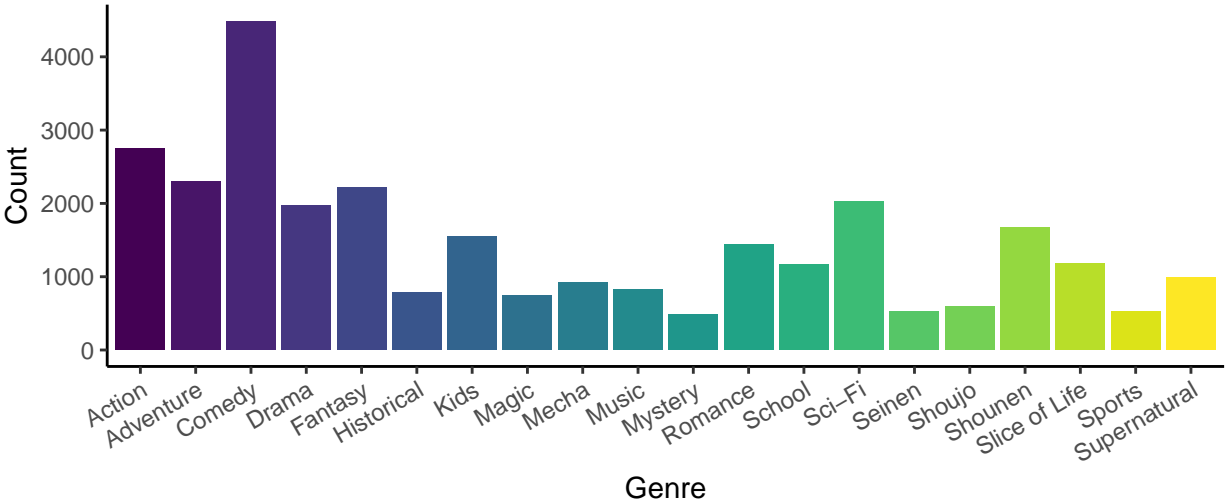
# Recommending Television Shows from User Ratings

Matthew Wolff

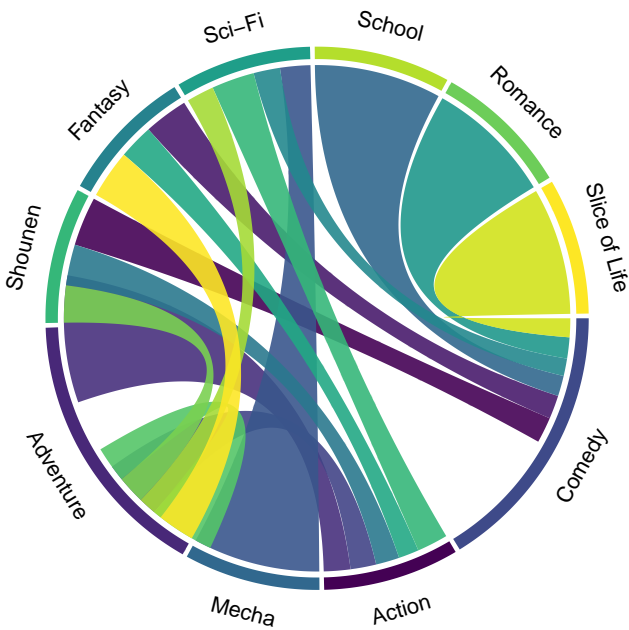
Table 1: Summary of Show Data and Missing Values

	Minimum	1st Quartile	Median	Mean	3rd Quartile	Max	Missing Vals
episodes	1.00	1.00	2.00	12.38	12.00	1818.00	340
rating	1.670	5.880	6.570	6.474	7.180	10.000	230
members	5	225	1550	18071	9437	1013917	0

Top 20 Most Popular Genres (from 11880 shows)



Most Frequent Genre Pairings



Frequent Pairing Counts

Genre1	Genre2	Count
Action	Sci-Fi	1008
Adventure	Fantasy	921
Comedy	Shounen	918
Adventure	Comedy	895
Action	Adventure	867
Comedy	Fantasy	839
Action	Comedy	838
Action	Shounen	766
Comedy	Romance	753
Comedy	School	729
Mecha	Sci-Fi	712
Adventure	Shounen	692
Comedy	Slice of Life	672
Action	Fantasy	663
Adventure	Sci-Fi	646
Comedy	Sci-Fi	624

Relationship and Distributions between Show Variables

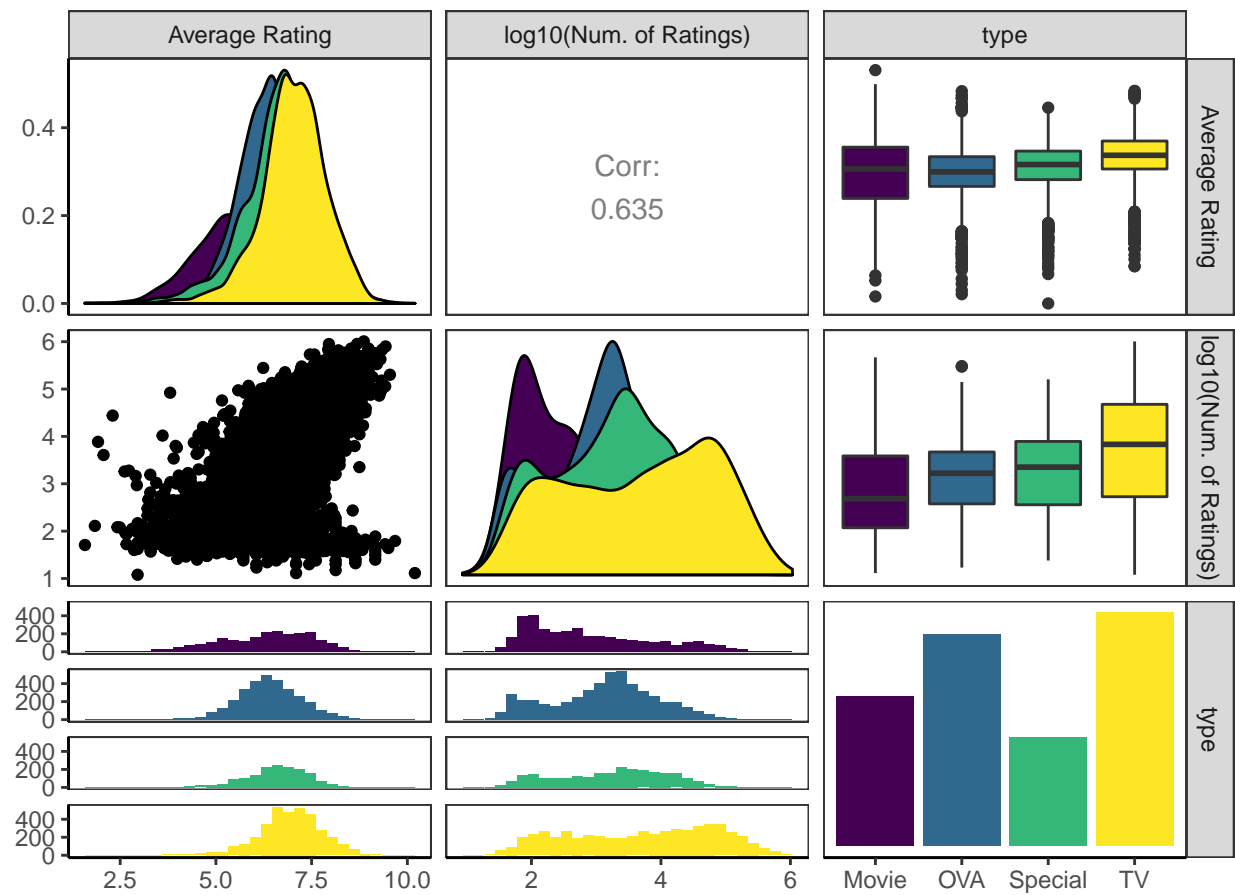
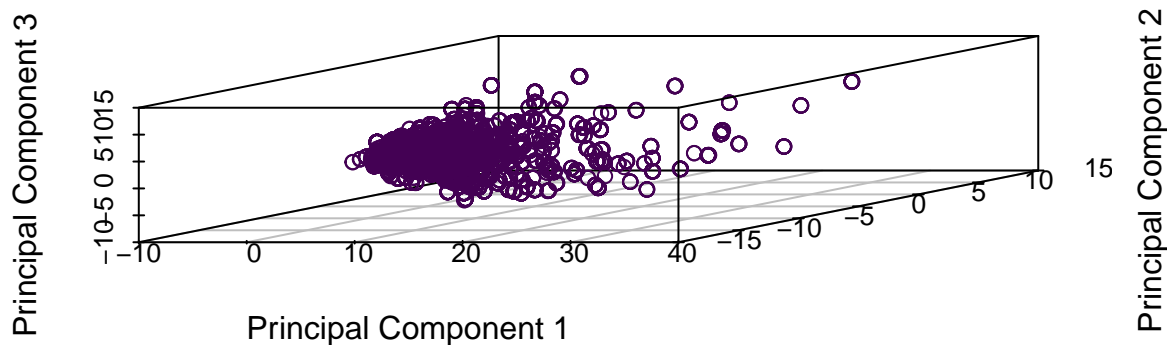


Table 2: Principal Component Analysis: Top Eigenvalues

	eigenvalue	percentage of variance	cumulative percentage of variance
comp 1	18.309054	12.540448	12.54045
comp 2	4.726647	3.237430	15.77788
comp 3	3.988872	2.732104	18.50998
comp 4	2.958149	2.026130	20.53611
comp 5	2.886937	1.977354	22.51347

Post-PCA: Three Principal Components, Unclustered



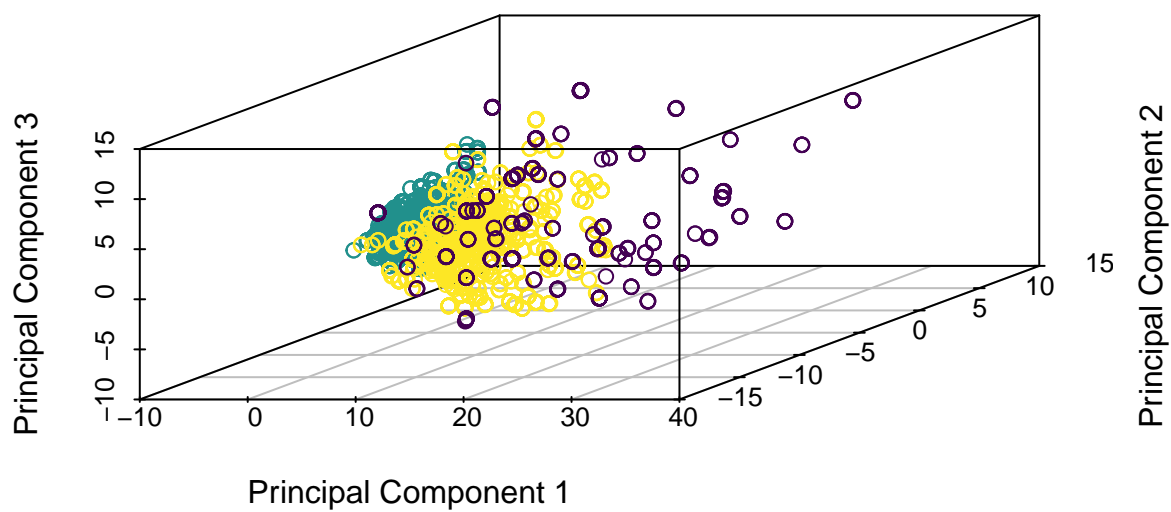
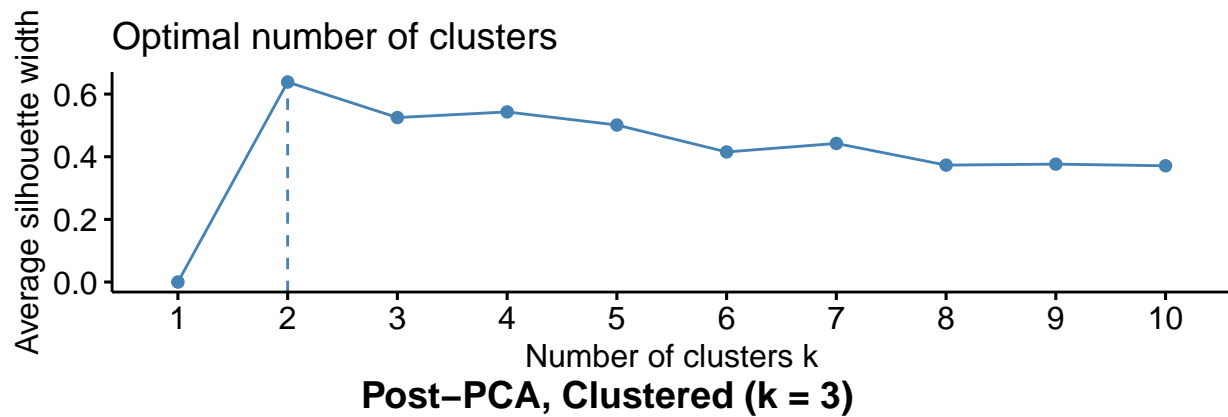


Table 3: Cluster 1 Recommendations

Name	Genres
High School DxD New	Action, Comedy, Demons, Ecchi, Harem, Romance, School
Clannad	Comedy, Drama, Romance, School, Slice of Life, Supernatural
Tengen Toppa Gurren Lagann	Action, Adventure, Comedy, Mecha, Sci-Fi