

ANALYSIS OF SUCCESS-BASED GENRE COLLABORATION NETWORK

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Genre Collaboration Network

- Data used from the paper, "Detecting collaboration profiles in success-based music genre network" by Oliveira et al. published at the 2021 International Society for Music Information Retrieval (ISMIR) conference
- Success measure = Number of Hit Songs

Exploratory Data Analysis

	Global 2017	Global 2018	Global 2019
Nodes	72	79	89
Edges	564	583	709
Average Degree	15.667	14.759	15.933
Weighted Avg. Deg	256.917	247.418	236.697
Avg. Clustering Coef.	0.743	0.757	0.754
Num. of Self-Loops	24	21	28

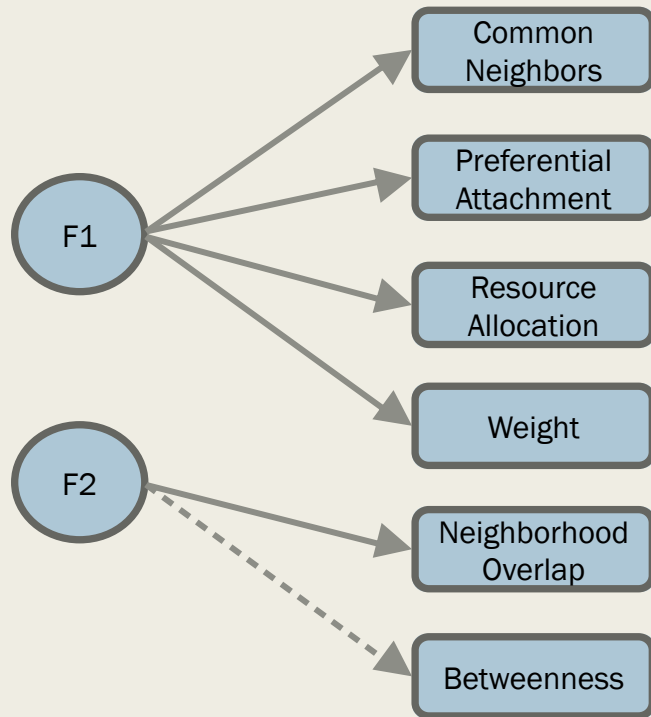
Network Metrics

- Weighted Degree
- Edge Betweenness
- Preferential Attachment
- Common Neighbors
- Neighborhood Overlap
- Resource Allocation

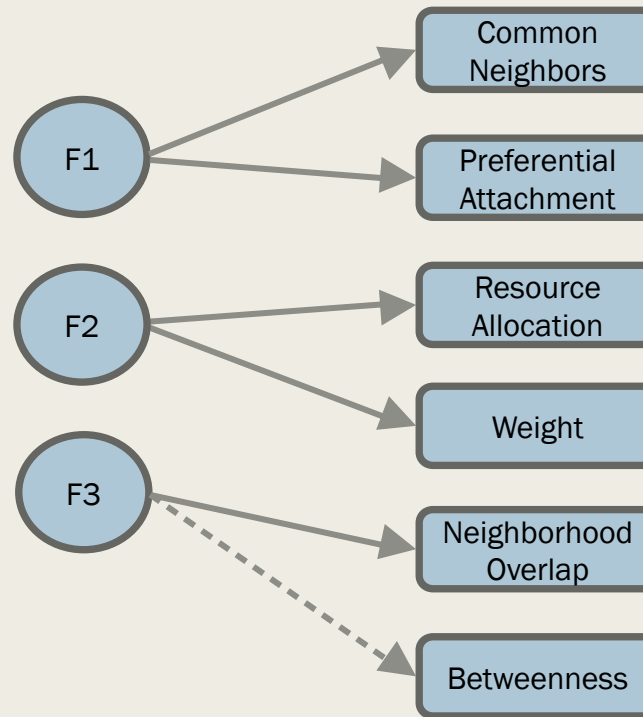
	Global 2017	Global 2018	Global 2019
Weight	pop rap – rap	Hip hop – rap	Latin – reggaeton
Betweenness	new wave – punk	Pop - sertanejo	Pop - sertanejo
Preferential Attachment	Pop – pop	Pop – pop	Pop – pop
Common Neighbors	Pop – pop	Pop – pop	Pop – pop
Neighborhood Overlap	Pop – pop	Pop – pop	Pop – pop
Resource Allocation	Pop – pop	Pop – pop	Pop – pop

Exploratory Factor Analysis

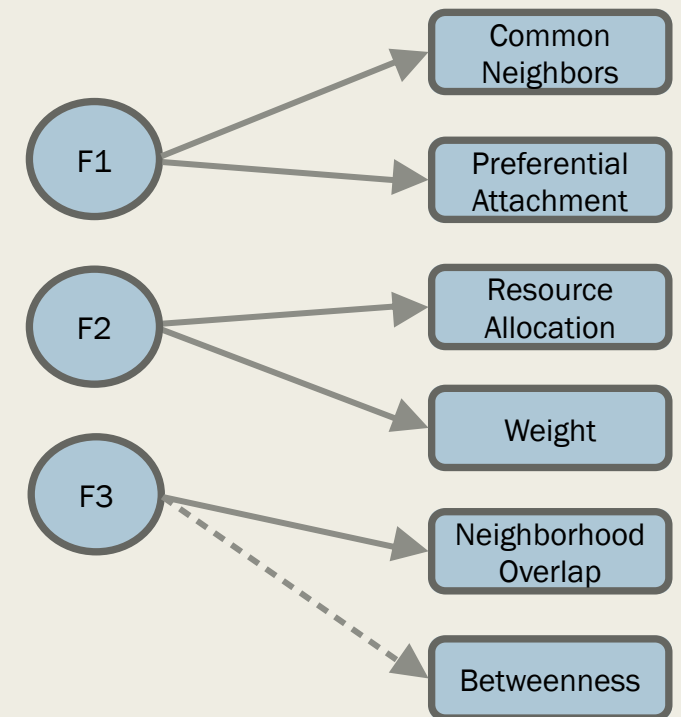
2017



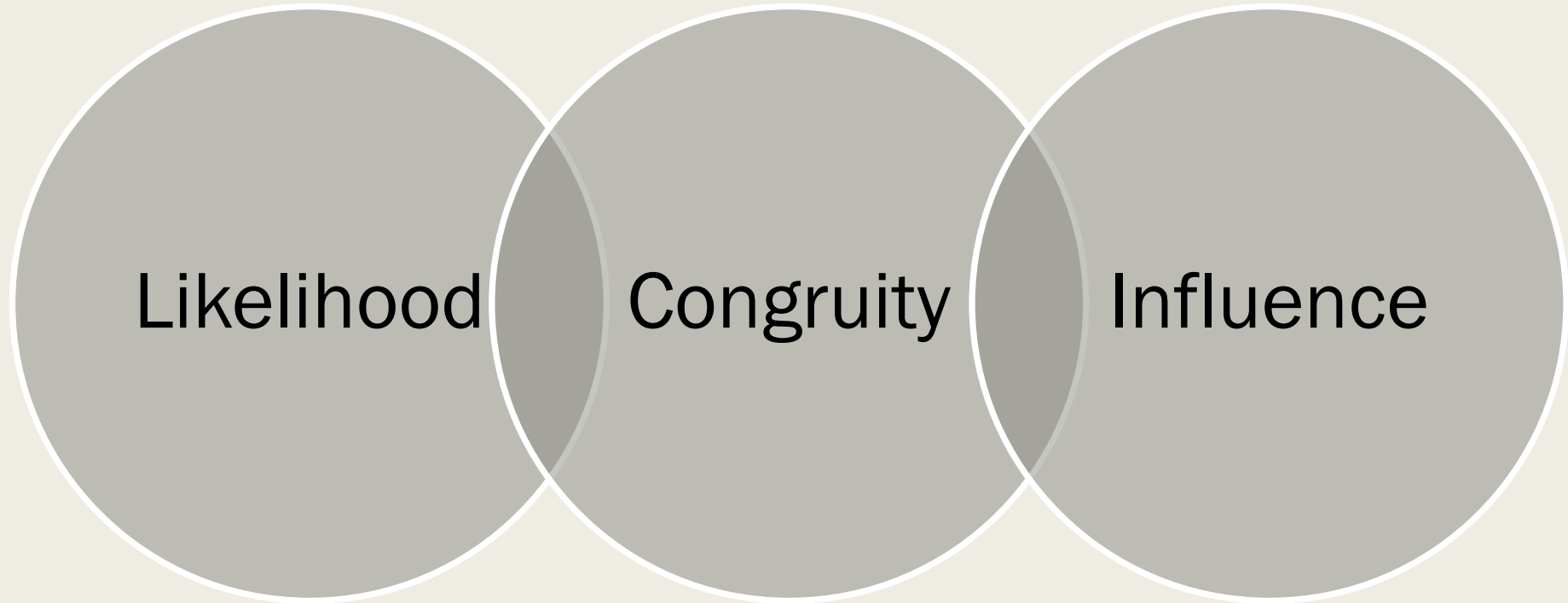
2018



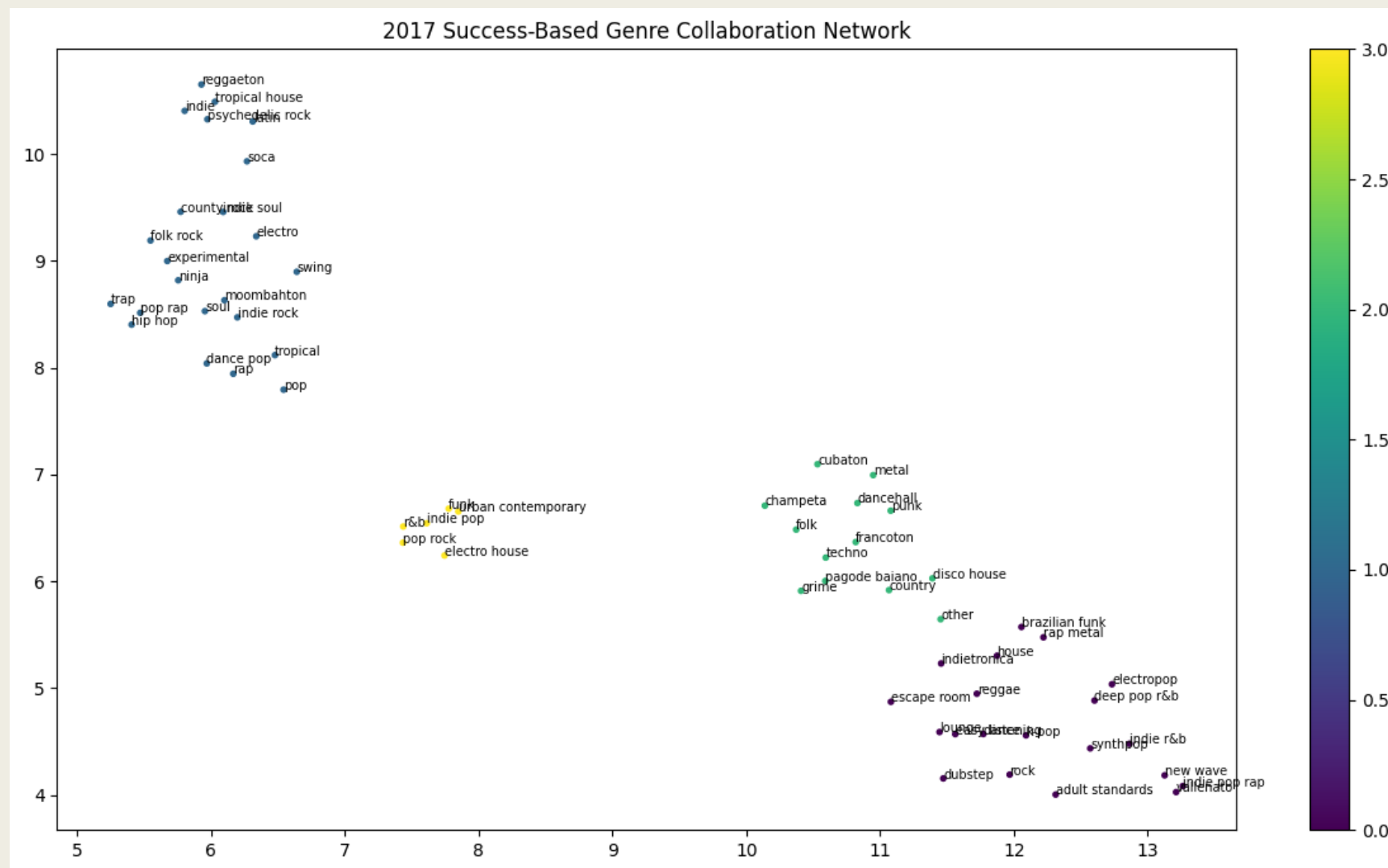
2019



Factors



Cluster Analysis



Limitations / Extensions

- Looked at Global Market only
- Further extensions and application: link prediction and recommendation system