Artist Popularity: Do Web and Social Music Services Agree?





Practical implications

No two indices are completely equivalent: we can use them to promote diversified recommendations

Service-based indices change at a much lower speed

The Web index is highly dynamic

Limitations

No constraint on regions, but concerts and culture are local events, important within a specific community

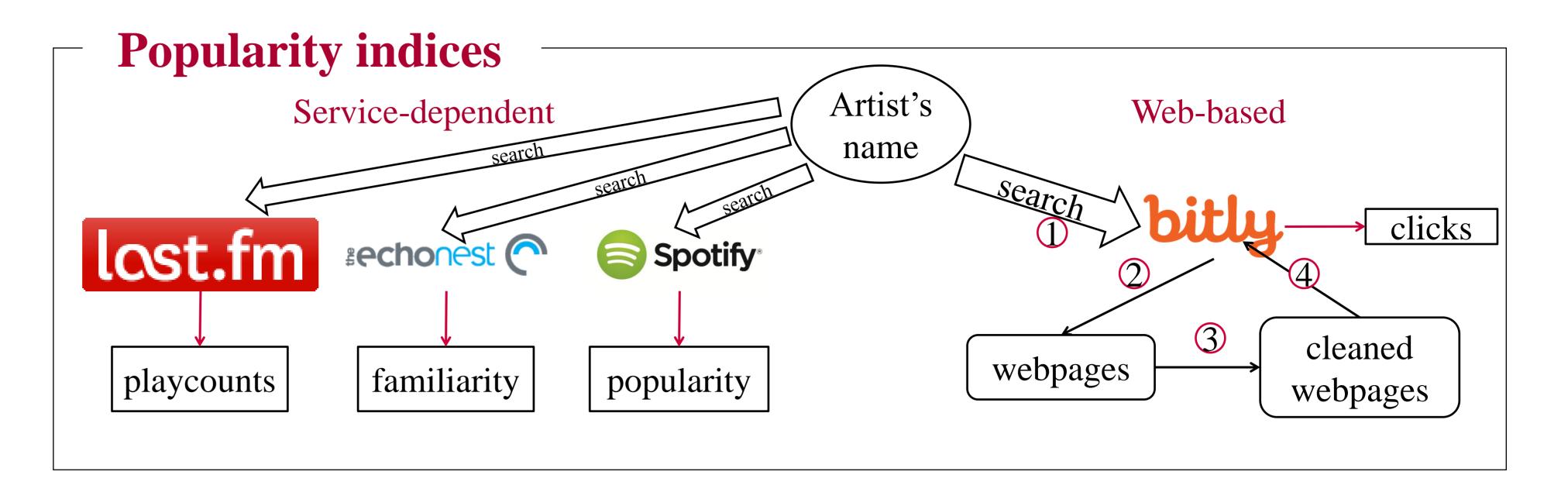
Positive vs negative popularity: exploit the context (where an artist is mentioned) in the Web index

<u>Alejandro Bellogín, Arjen P. de Vries, Jiyin He</u>

Centrum Wiskunde & Informatica, The Netherlands Universidad Autónoma de Madrid, Spain {a.bellogin, arjen.de.vries, j.he}@cwi.nl







Open questions

Are users more interested in *currently* popular artists or they prefer those that are *always* popular?

Should all the reasons why an artist could be popular considered equally important?

Check the source code and dataset at:

http://www.cwi.nl/~media/papers/ICWSM13



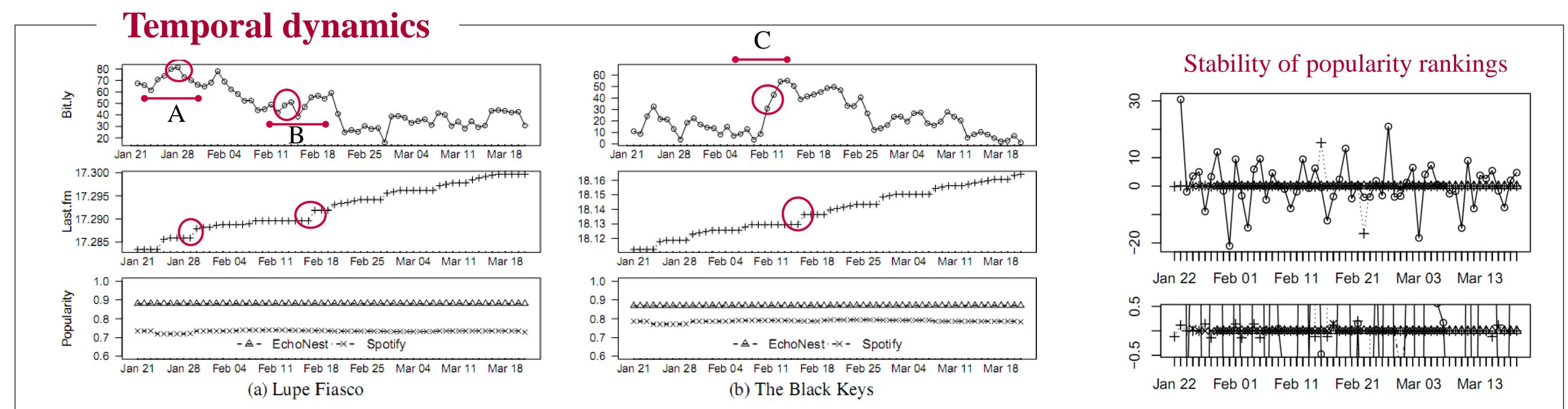
Dataset

1,312 artists

Timestamped popularity indices (~ every 3 hours)

Jan 21 – Mar 21

including the Grammy awards and The Oscars





Procession of the serve metal post-grunge leavy metal post-grunge leavy Gaga Nu-metal black eyed peas legend female vocalists The Killers hard rock
a dance r&b soul Progressive alternative metal female vocalists over punk rock
glam pop punk rock
glam punk rock
glam

EchoNest

Pogressive indie pop singer-songwriter post-grunge electronica Pop-punk alternative metal skate punk electronic ^{gaga} metal Lady Gaga pop punk indie rock ^{dwesone} usa pop punk indie rock ^{dwesone} usa **ateenative metal** british danceg Grunge emo **Adeenative metal** british danceg Grunge emo And rock indie date rock ^{gaga} british hard rock indie date rock ^{gaga} british hard rock indie date rock ^{gaga} british british british ateenative metal british gaga british gaga british gaga british gaga british gaga british briti

- Correlations				
ρ	pop_E	pop_L	pop_S	
pop_E	1.00			
pop_L	0.88	1.00		
pop_S	0.75	0.66	1.00	
Spearman				
τ	pop_E	pop_L	pop_S	
pop_E	1.00			
pop_L	0.72	1.00		

0.56

Kendall

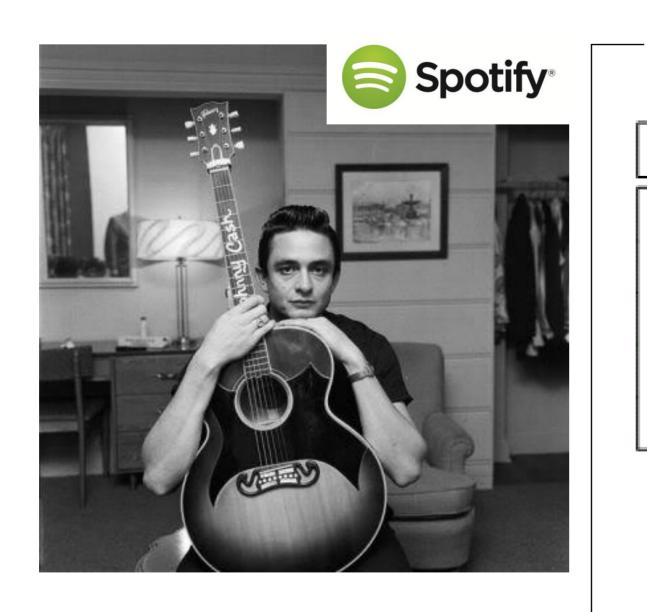
 pop_S

0.47

1.00







Ranking-based comparison

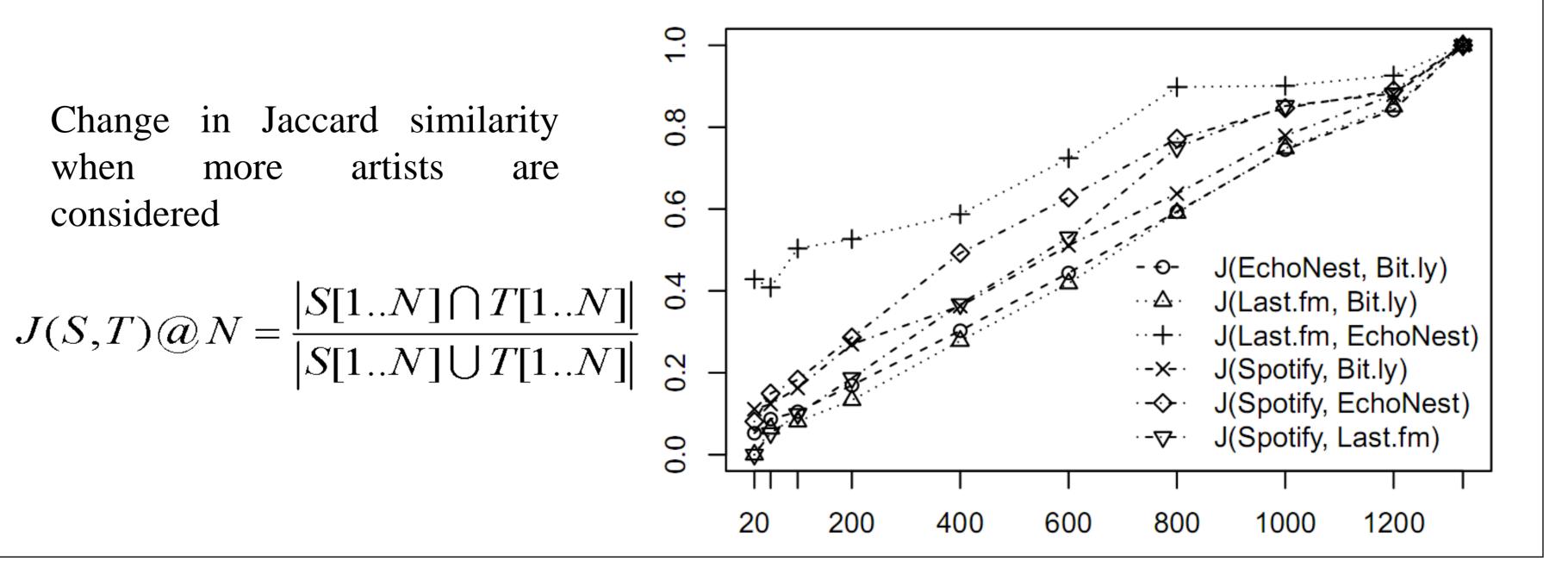
Bit.ly	EchoNest	Last.fm	Spotify
One Direction	Coldplay	The Beatles	Johnny Cash
Kelly Clarkson	Rihanna	Radiohead	Frank Sinatra
Anne Hathaway	Radiohead	Coldplay	Elvis Presley
Taylor Swift	RHCP	Muse	Kanye West

Top-5popularartists throughoutthe timespan ofour dataset





Justin Bieber Eminem RHCP Snoop Dogg



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