

Say It Loud

Topic Modeling on the Billboard
Hot 100 from 1965-1970



by David Luther



the SHIRELLES



WILL YOU LOVE
ME TOMORROW

KING
S-1047
STEREO

James Brown

SAY IT LOUD

I'M BLACK AND I'M PROUD



Say It Loud
I'm Black And Proud
PT. 1 & 2

Goodbye My Love

Licking Stick

I'll Lose My Mind

AND MANY OTHER HITS

**EDWIN
STARR**

WAR
HE WHO PICKS A ROSE



Stereo

CAN ALSO BE PLAYED IN MONO

5C 006-91664

O'JAYS

BACK
STABBERS



GOLD STANDARD SERIES



45 Extended Play
20301



SAM COOKE

Having a Party

CHAIN GANG
SUMMERTIME
YOU SEND ME

Natural language Processing

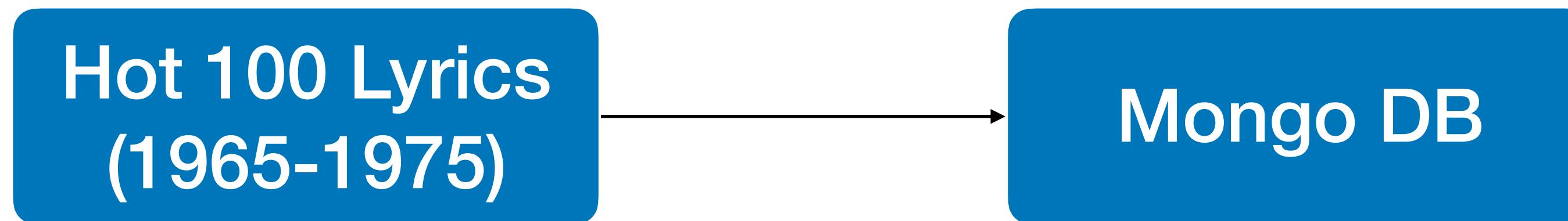
Process

Hot 100 Lyrics
(1965-1975)



| STAR PERFORMER—Sides registering greatest proportionate upward progress this week. | | | | | | | | | | Record Industry Association of America seal of certification as million selling single. | | |
|--|----|----|----|---------------------------------|--|---|----|---|---|---|-------------------------------------|---|
| THIS WEEK | - | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | TITLE | Artist (Producer), Label & Number | Weeks On Chart |
| | 1 | 1 | 3 | HEY JUDE | Beatles (George Martin), Apple 2226 | 5 | | | | 33 | 22 17 7 YOU'RE ALL I NEED TO GET BY | 12 Marvin Gaye & Tammi Terrell (Ashford-Simpson), Tamla 54169 |
| | 2 | 2 | 1 | HARPER VALLEY P.T.A. | Jeannie C. Riley (Shelby S. Singleton Jr.), Plantation 3 | 8 | | | | 34 | 34 34 47 BABY, COME BACK | 6 Equals (President Records Prod.), RCA Victor 47-9583 |
| | 3 | 5 | 15 | FIRE | Crazy World of Arthur Brown (Kif Lambert), Atlantic 2556 | 6 | | | | 35 | 39 48 48 HELP YOURSELF | 7 Tom Jones (Peter Sullivan), Parrot 40029 |
| | 4 | 20 | 27 | LITTLE GREEN APPLES | O. C. Smith (Jerry Fuller), Columbia 44616 | 9 | | | | 36 | 37 61 77 FOOL FOR YOU | 6 Impressions (Curtis Mayfield), Curtom 1932 |
| | 5 | 9 | 16 | GIRL WATCHER | O'Keysons (North State Music), ABC 11094 | 9 | | | | 37 | 42 43 68 I MET HER IN CHURCH | 5 Box Tops (Dan Penn), Mala 12017 |
| | 6 | 17 | 18 | 21 | MIDNIGHT CONFESSIONS | Grassroots (Steve Barri), Dunhill 4144 | 7 | | | 38 | 38 59 90 HOLD ME TIGHT | 5 Johnny Nash (Johnny Nash & Arthur Jenkins), JAD 207 |
| | 7 | 18 | 19 | 19 | MY SPECIAL ANGEL | Vogues (Dick Glasser), Reprise 0766 | 6 | | | 39 | 33 33 39 WHO IS GONNA LOVE ME? | 8 Dionne Warwick (Bacharach-David), Scepter 12226 |
| | 8 | 8 | 9 | I'VE GOTTA GET A MESSAGE TO YOU | Bee Gees (Robert Stigwood), Atco 4403 | 9 | | | | 40 | 40 44 64 BREAK YOUR PROMISE | 7 Delfonics (Stan and Bell), Philly Groove 152 |
| | 9 | 25 | 29 | 54 | OVER YOU | Gary Puckett & the Union Gap (Jerry Fuller), Columbia 44644 | 4 | | | 41 | 41 41 59 I WISH IT WOULD RAIN | 8 Gladys Knight & The Pips (N. Whitefield), Soul 35047 |
| | 10 | 5 | 10 | 13 | SLIP AWAY | Clarence Carter (Rick Hall & Staff), Atlantic 2588 | 14 | | | 42 | 28 26 34 SPECIAL OCCASION | 9 Smokey Robinson & The Miracles (Smoky-Cleveland), Tamla 54172 |
| | 11 | 11 | 11 | 11 | TIME HAS COME TODAY | Chambers Brothers (David Rabinow), Columbia 44474 | 10 | | | 43 | 47 47 61 DOWN ON ME | 7 Big Brother & the Holding Company (Bob Shad), Mainstream 642 |
| | 12 | 7 | 3 | 2 | PEOPLE GOT TO BE FREE | Rascals (Rascals), Atlantic 2537 | 13 | | | 44 | 52 53 86 POOR BABY | 5 Cowsills (Mrs. Farrell), MGM 13981 |
| | 13 | 10 | 14 | 14 | I SAY A LITTLE PRAYER | Aretha Franklin (Jerry Wexler), Atlantic 2456 | 9 | | | 45 | 46 62 85 SHOOT 'EM UP BABY | 6 Andy Kim (Jeff Barry), Steed 710 |
| | 14 | 14 | 21 | 31 | SAY IT LOUD (I'm Black and I'm Proud) | James Brown & His Famous Flames (James Brown), King 6167 | 6 | | | 46 | 56 76 100 COURT OF LOVE | 4 Unifics (Guy Draper), Kapp 935 |
| | 15 | 12 | 12 | 12 | REVOLUTION | Beatles (George Martin), Apple 2226 | 5 | | | 47 | 50 52 72 CHAINED | 5 Marvin Gaye (Frank Wilson), Tamla 54170 |
| | 16 | 16 | 4 | 4 | HUSH | Cream (Eric Clapton), Cream 4417 | 9 | | | 48 | 48 56 57 STREET FIGHTING MAN | 6 Rolling Stones (Jimmy Miller), London 909 |
| | 17 | — | — | — | — | — | — | | | 49 | 49 49 87 I FOUND A TRUE LOVE | 4 Wilson Pickett (Tom Dowd), Atlantic 2558 |
| | 18 | — | — | — | — | — | — | | | 50 | 58 — — WHITE ROOM | 2 Cream (Eric Clapton), Cream 4417 |
| | 19 | — | — | — | — | — | — | | | 84 | 85 — — ALFIE | 2 Elton John (Nancy Sinatra), Candy 7074 |
| | 20 | — | — | — | — | — | — | | | 85 | — — — A LITTLE LESS CONVERSATION | 1 Elvis Presley, RCA Victor 47-9610 |
| | 21 | — | — | — | — | — | — | | | 86 | — — — HITCHCOCK RAILWAY | 1 Jose Feliciano (Rick Jarrett), RCA Victor 47-9641 |
| | 22 | — | — | — | — | — | — | | | 87 | — — — A LITTLE LESS CONVERSATION | 1 Elvis Presley, RCA Victor 47-9610 |
| | 23 | — | — | — | — | — | — | | | 88 | — — — ALFIE | 2 Elton John (Nancy Sinatra), Candy 7074 |

Process



Process

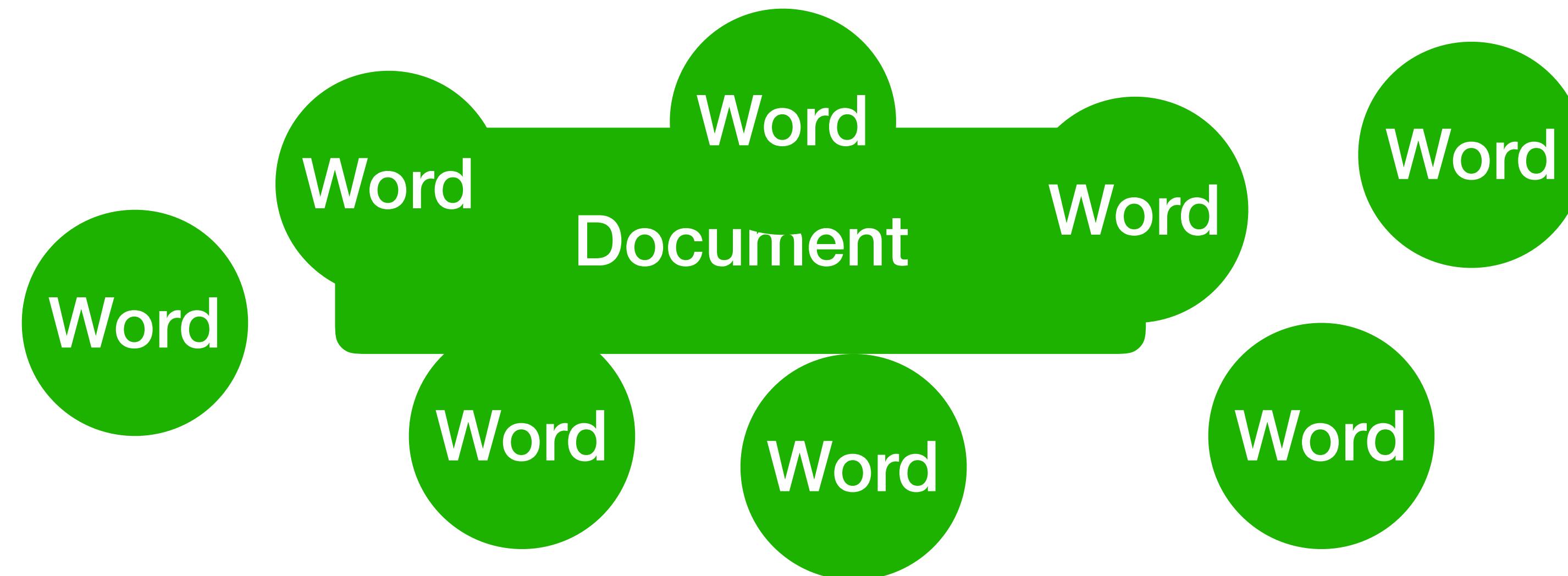


Spell Checker

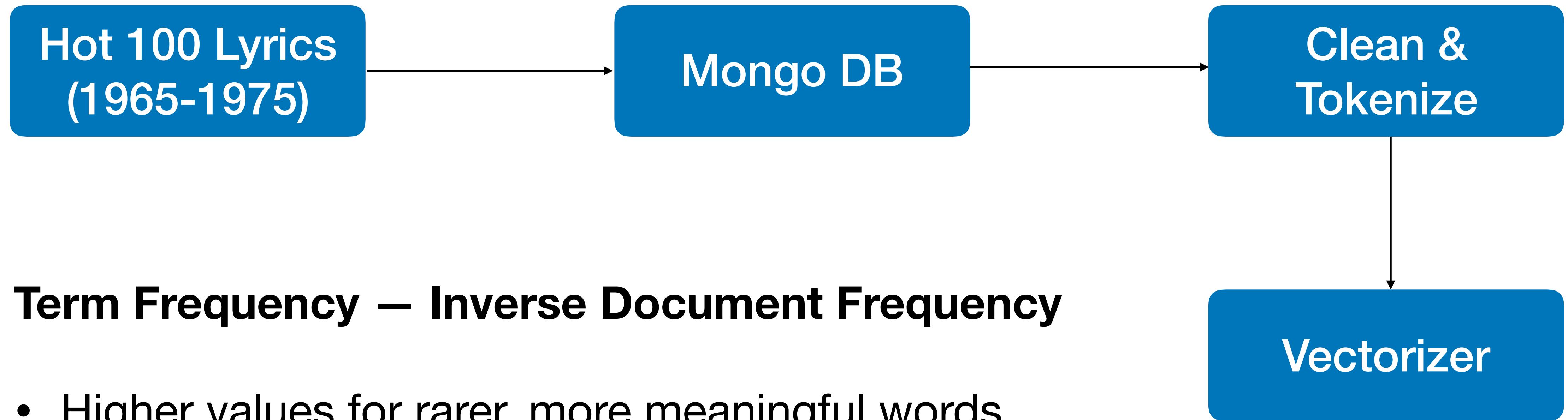
loving

alright baby

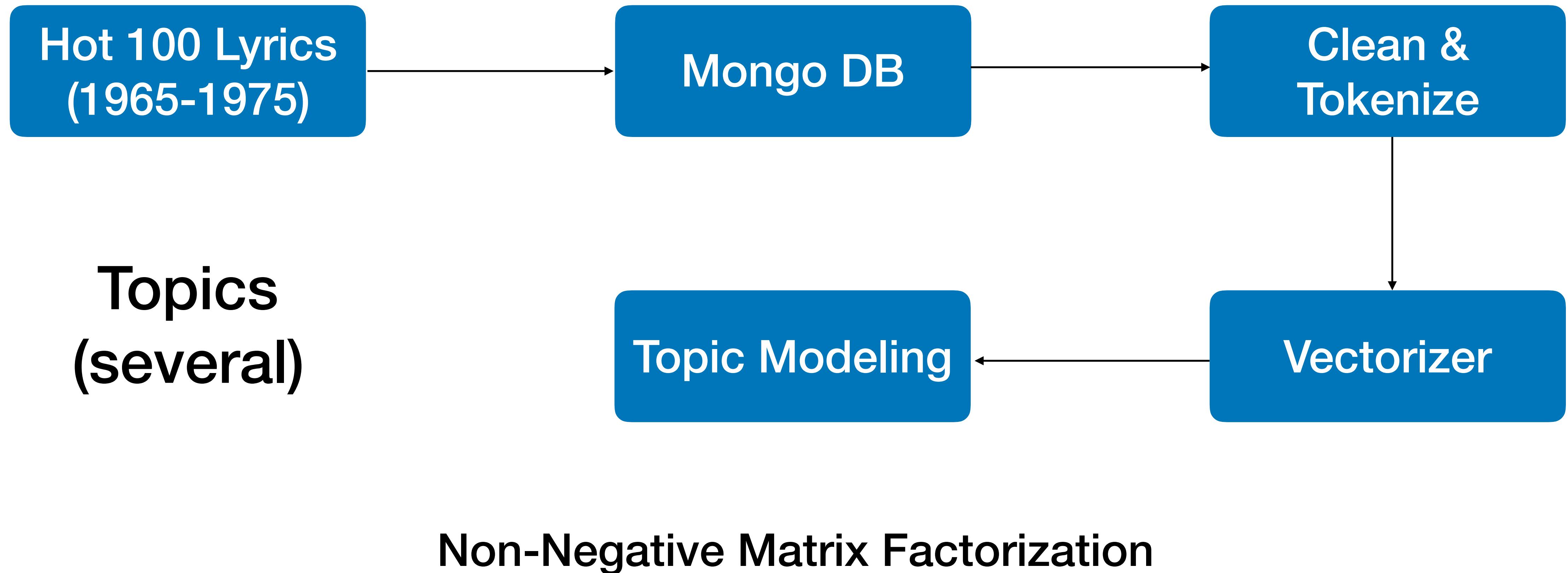
Process



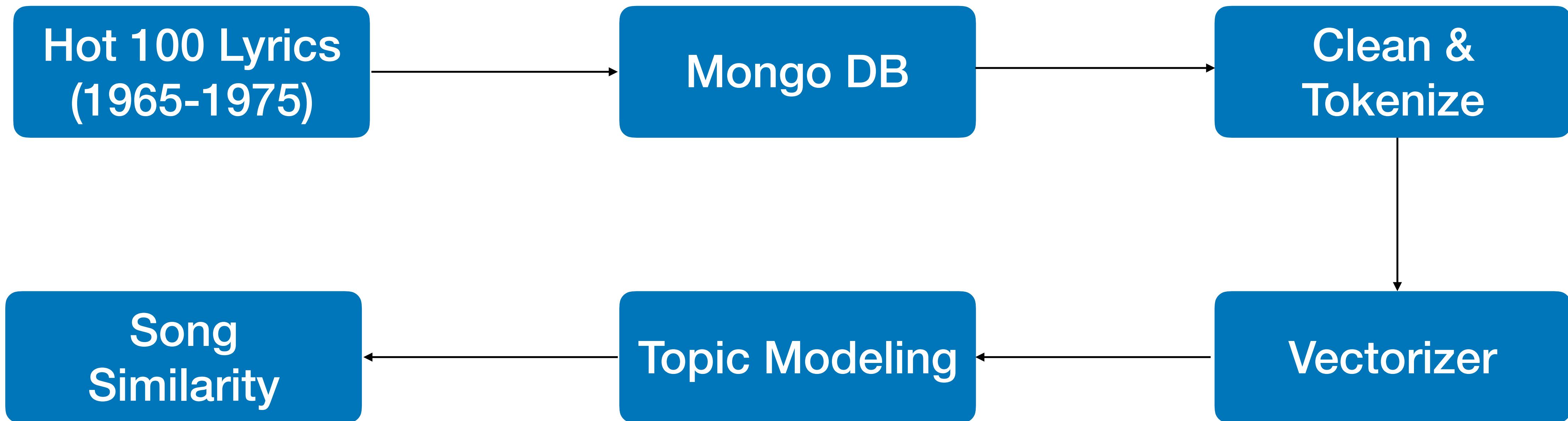
Process



Process



Process



Topics

- Decided on 16 total
- Less than 16: vague sentimental mush
- Some emerge at this point that are more distinct
- More than 16: new topics strongly driven by single songs

Topics

Loss and Longing

long, away, eyes, gone, lonely, rain, tears, left, darling, heart

Topics

Dance Party

dance, night, falling, music, rock, tonight, dancing, roll, band, floor

Loss and Longing

long, away, eyes, gone, lonely, rain, tears, left, darling, heart

Topics

A Touch of Conscience

right, wrong, think, help, place, look, free, lets, comes, cause

Dance Party

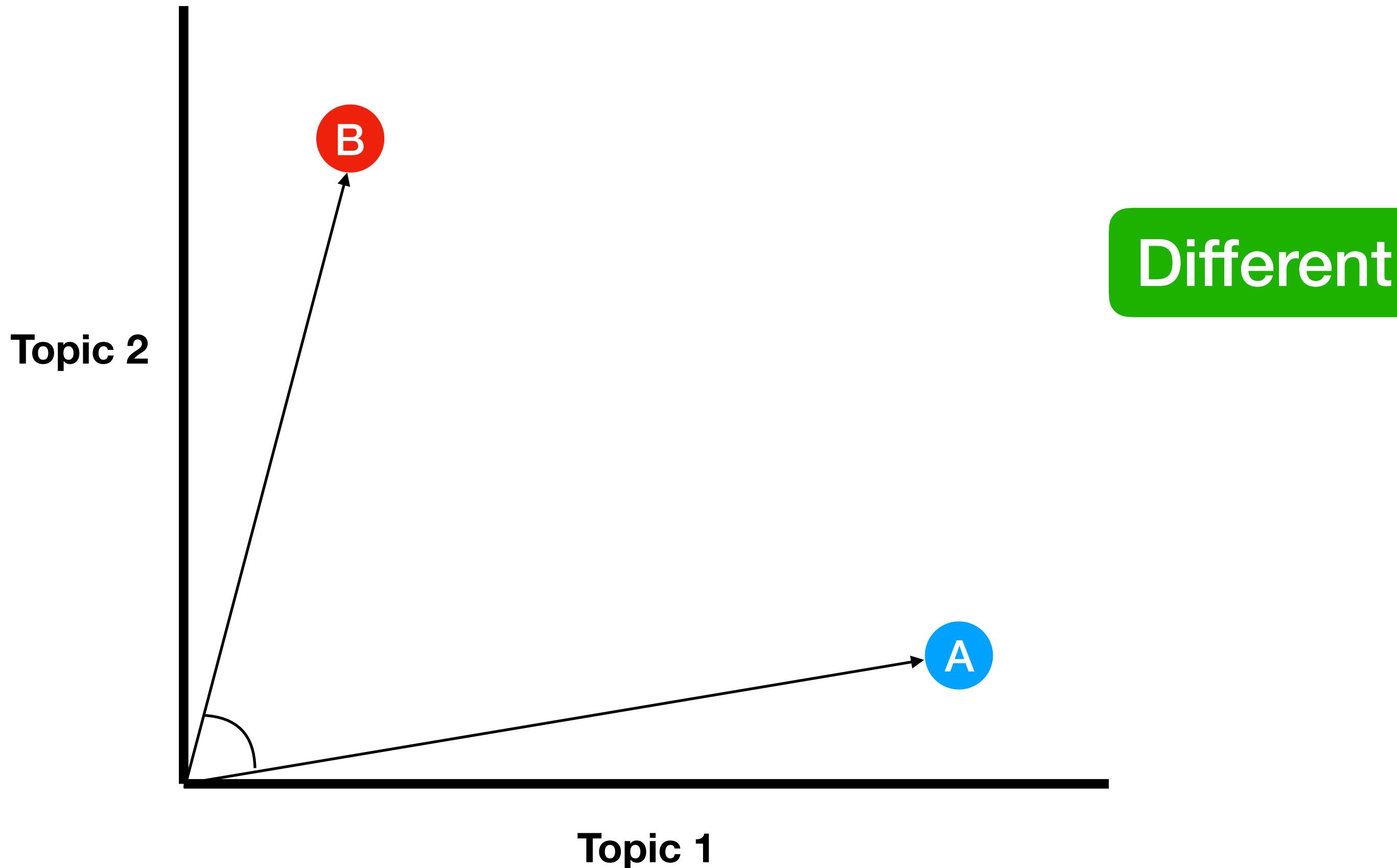
dance, night, falling, music, rock, tonight, dancing, roll, band, floor

Loss and Longing

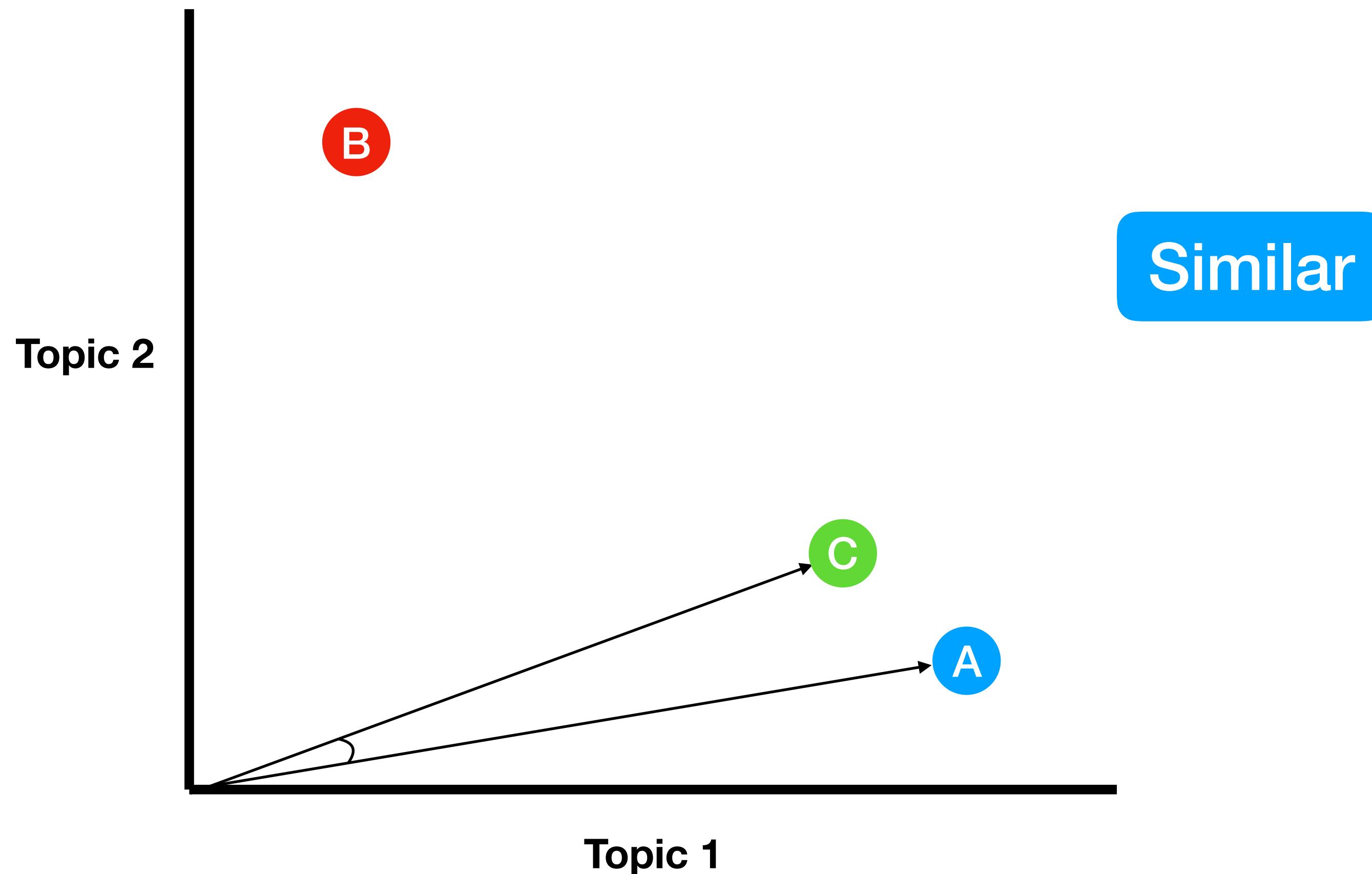
long, away, eyes, gone, lonely, rain, tears, left, darling, heart

Finding Similar Songs

Cosine Similarity



Cosine Similarity



Finding Similar Songs

War – Edwin Starr

- | | |
|---|-------|
| 1. You're No Good – Linda Ronstadt | 0.025 |
| 2. Good Vibrations – The Beach Boys | 0.031 |
| 3. You've Lost That Lovin' Feelin' – The Righteous Brothers | 0.037 |
| 4. Gimme Gimme Good Lovin' – Crazy Elephant | 0.040 |
| 5. My Baby Loves Lovin' – White Plains | 0.041 |

Finding Similar Songs

Back Stabbers – The O’Jays

- | | |
|--|-------|
| 1. Bend Me Shape Me – The American Breed | 0.075 |
| 2. Why Can’t We Be Friends – War | 0.088 |
| 3. Elenore – The Turtles | 0.099 |
| 4. Hello Its Me – Todd Rundgren | 0.108 |
| 5. Come And Get It – Badfinger | 0.112 |

Finding Similar Songs

Say It Loud (I'm Black And I'm Proud) – James Brown

- | | | |
|----|---|-------|
| 1. | Monster Mash – Bobby Boris Pickett And The Cryptkickers | 0.114 |
| 2. | Mercy Mercy Me The Ecology – Marvin Gaye | 0.136 |
| 3. | Fight The Power – The Isley Brothers | 0.153 |
| 4. | Brother Louie – Stories | 0.155 |
| 5. | Long Train Runnin' – The Doobie Brothers | 0.155 |

Conclusion

Topic patterns are weak at best

Why?

- Billboard Year-End Hot 100, after all
- Lyrics are lyrics — often vague, stronger with multiple interpretations

Topics may be stronger with larger pool of material