

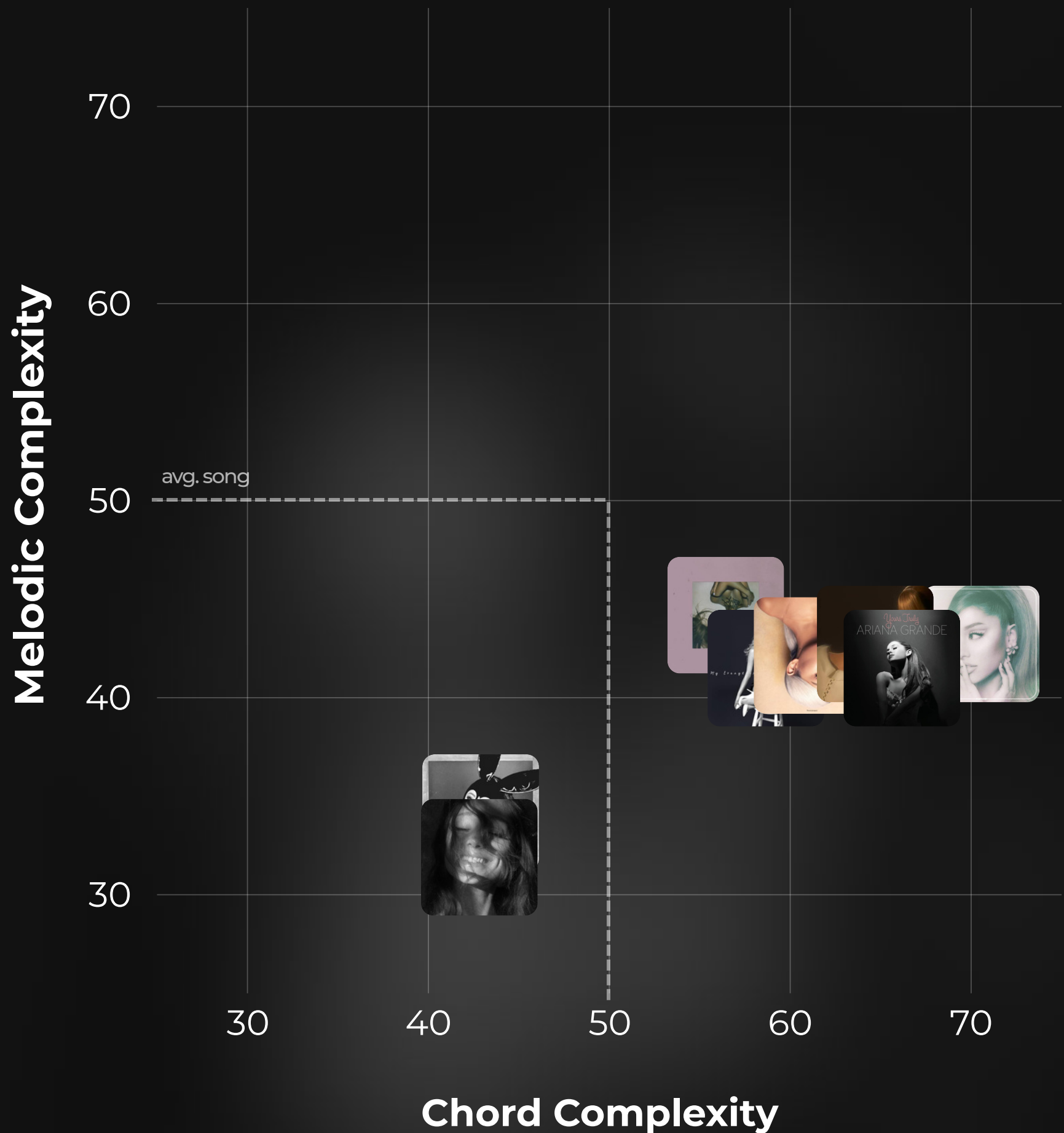
Ariana Grande

Songwriting Stats



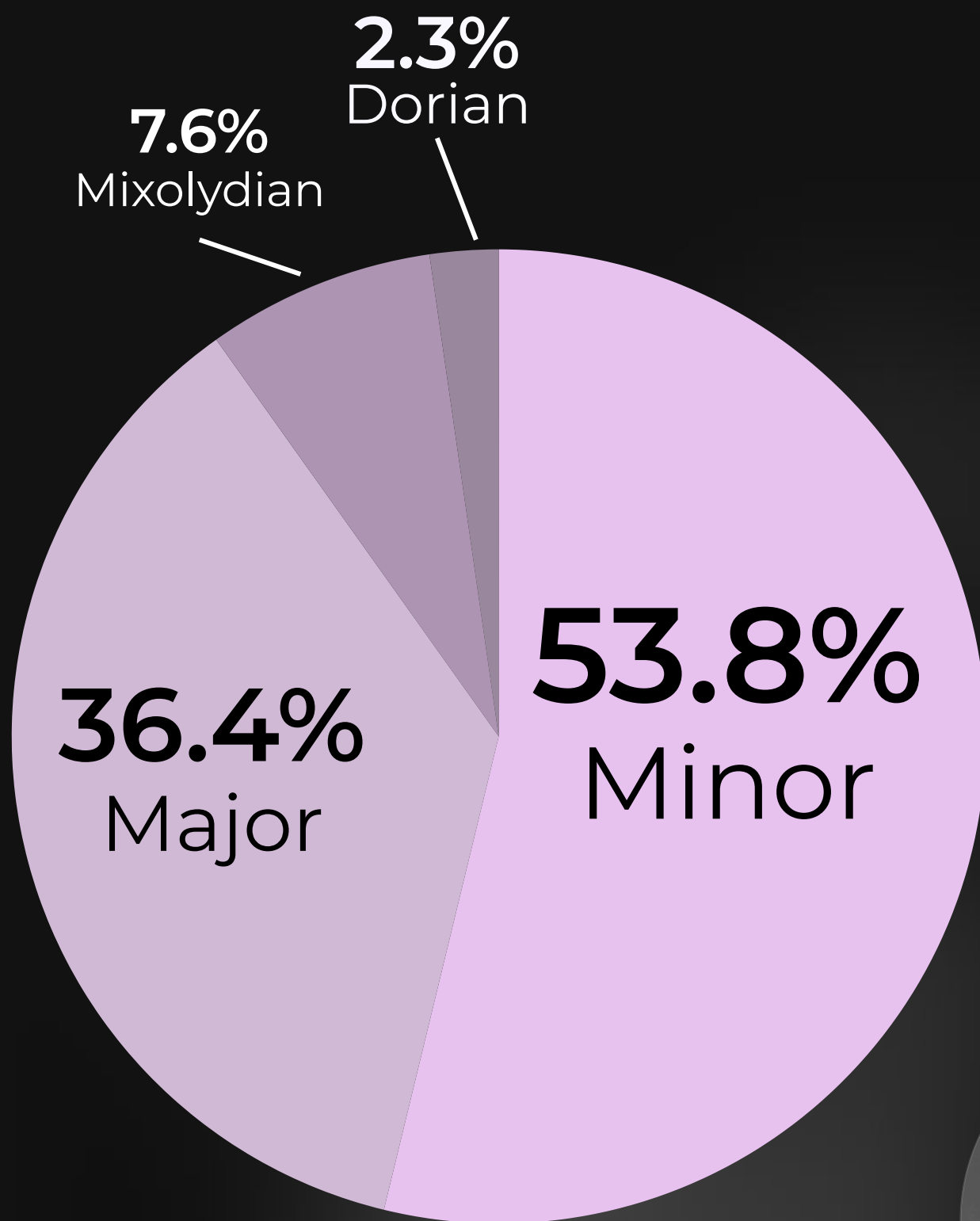
Melody vs. Harmony

Learn more about these metrics on our last slide →

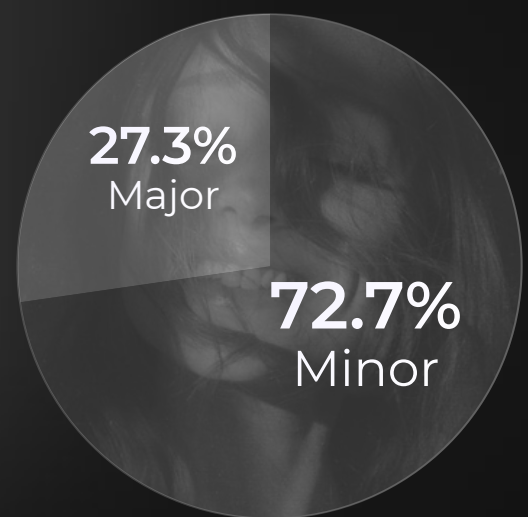


Ari's Favorite Scales

across her entire catalog



Full Catalog

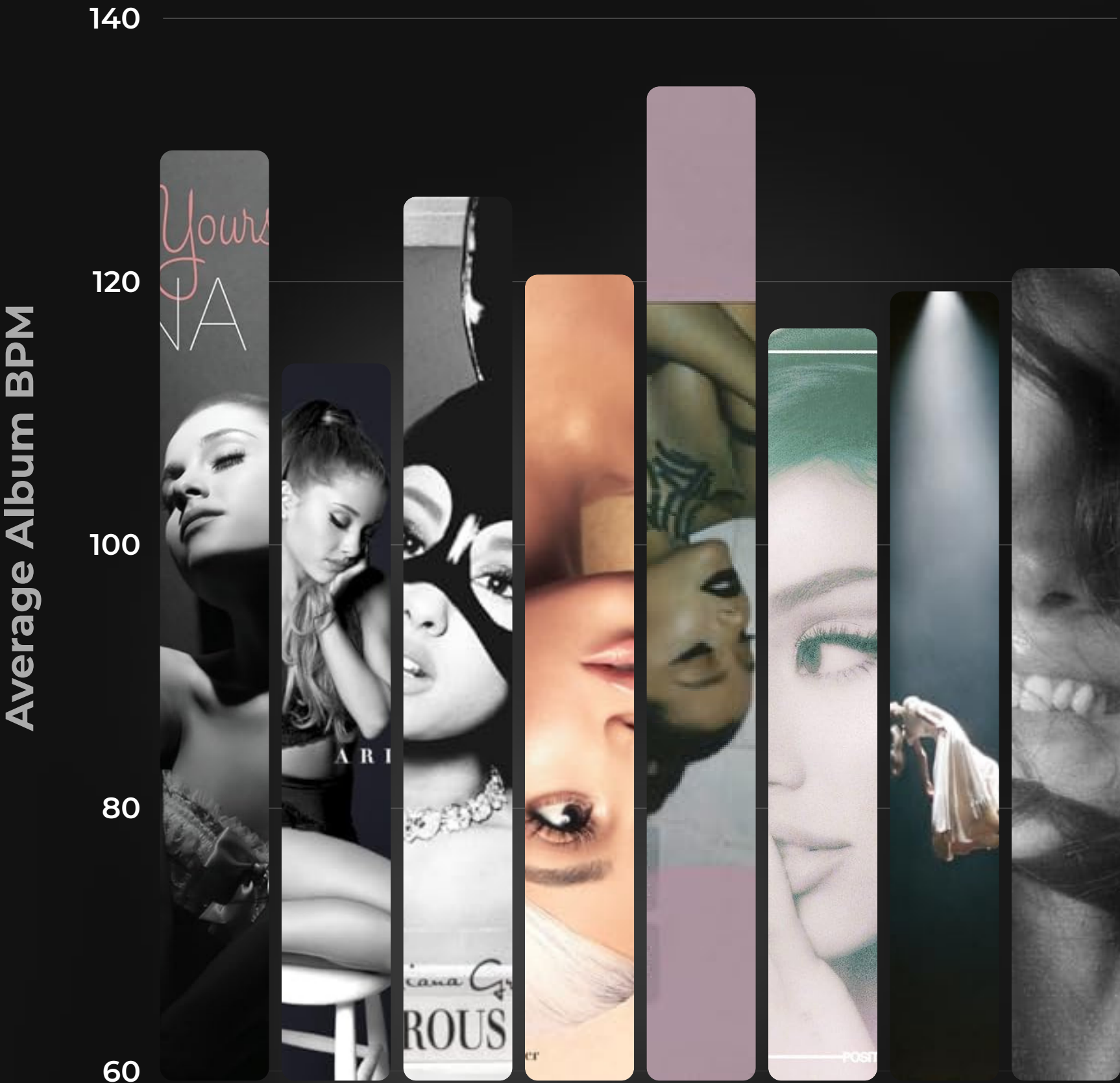


petal



Album Tempo Comparison

Calculated by average album tempo (BPM)



petal Vocal Range

*Comparing the lowest note and highest note of each chorus on **petal***



Melodic Movement

Syncopation Score

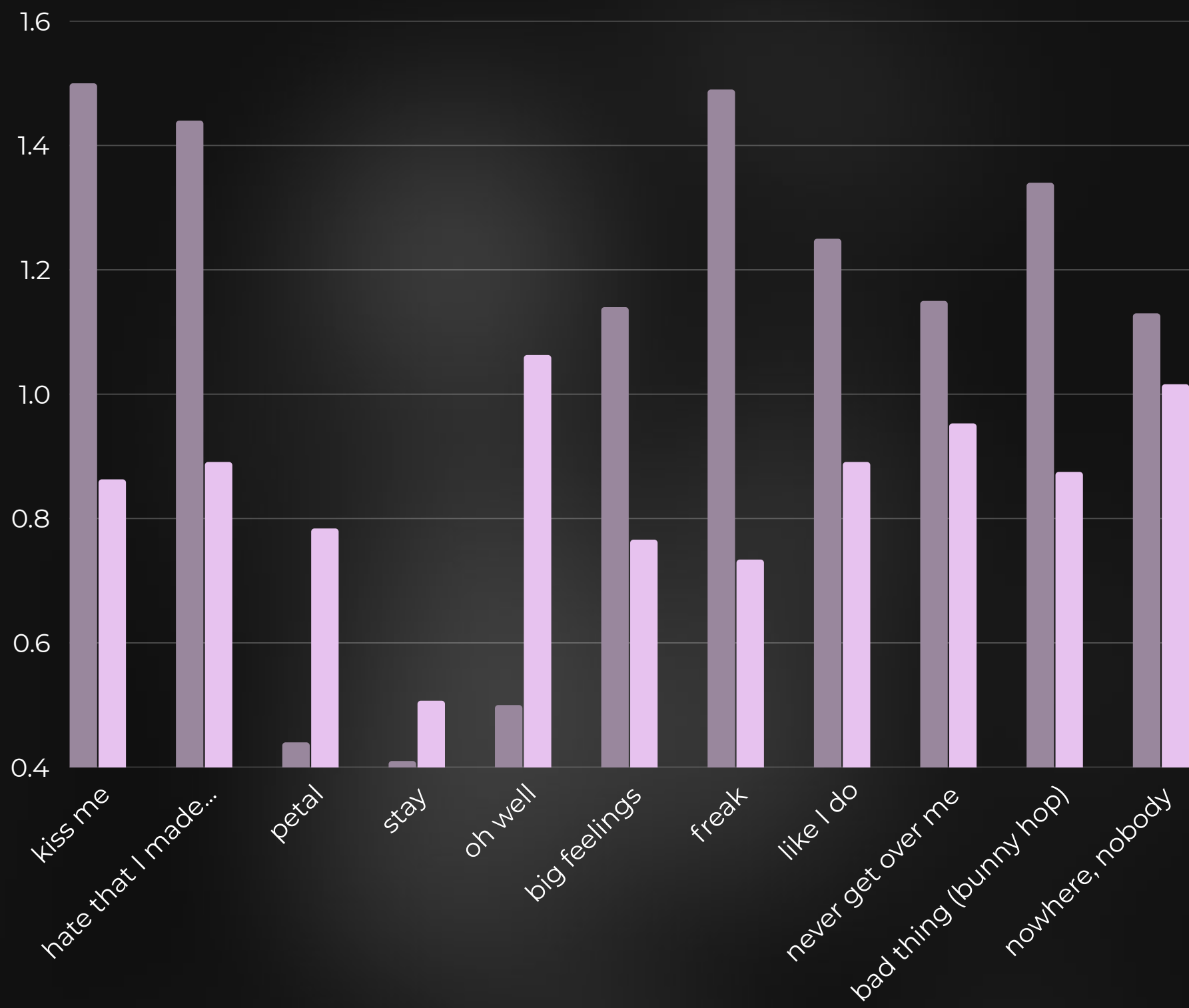
Syncopation measures how much a melody emphasizes an off beat.

Higher syncopation score = more frequent off-beat emphasis

Beats Per Note

Beats per note measures how frequently a melody changes notes.

Higher scores = longer held notes, lower scores = jumpier melodies



Songs with the Highest Chord-Melody Tension



1 Touch It

97.39



2 imperfect for you

96.94



3 my hair

96.69



4 freak

96.69



5 Daydreamin'

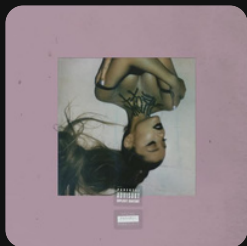
96.45



Most Unique Chord Progressions



1 Right There ft Big Sean 99.39



2 jada (like that) 97.94



3 34 35 97.94



4 my hair 97.94



5 love language 97.94



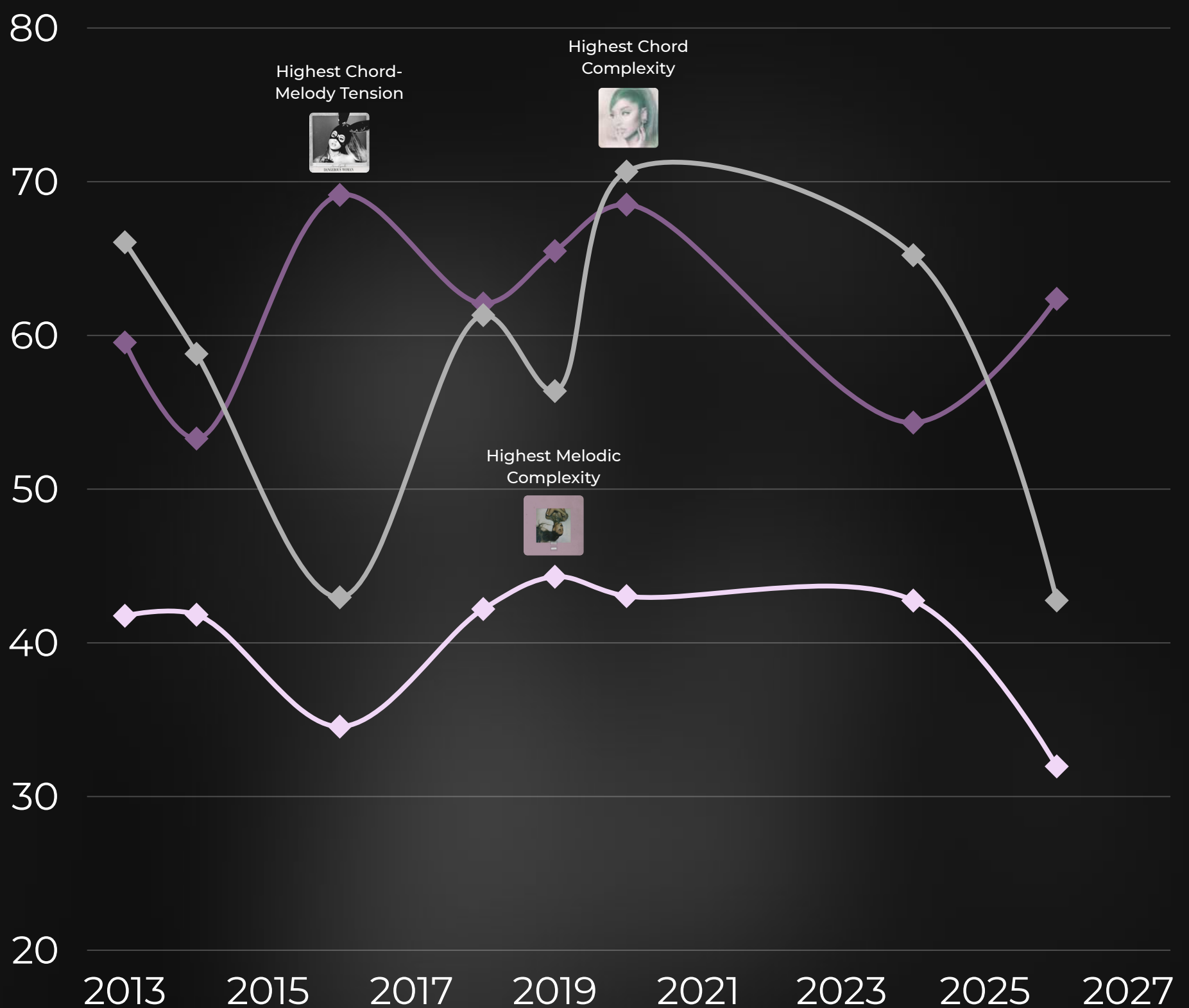
Melody & Chords Over Time

Learn more about these metrics on our last slide →

Chord Complexity

Chord-Melody Tension

Melodic Complexity



Welcome, Music Nerds



Hate That I Made You Love Me Chords and Melody by Ariana Grande



What is Hooktheory?

Hooktheory's TheoryTab Database is the world's largest collection of songs analyzed by their underlying chord progressions and melodies.

Every tab is crowd-sourced and community-maintained (sort of like Wikipedia) by music lovers like you!

Explore the database with over 75,000+ song analyses for FREE at [Hooktheory.com](https://hooktheory.com)



About Our Metrics

More at [Hooktheory.com](https://hooktheory.com)

Chord Complexity

Chord Complexity tracks when a song goes **beyond simple three-note chords**—either by adding **extra tones** (like 7ths or add9s) or by borrowing notes from **outside the key**—creating richer, more sophisticated harmonies.

Melodic Complexity

Melodic Complexity reflects two factors: the use of **notes outside the key** and **rhythmic syncopation**, together capturing how intricate or surprising a melody feels.

Chord-Melody Tension

Chord-Melody Tension quantifies how often **melody notes fall outside the current chord**, producing dissonance that creates a sense of instability

Chord Progression Novelty

Chord Progression Novelty measures how **uncommon a song's chord changes** are compared to others in the Hooktheory database, highlighting progressions that deviate from typical patterns.

Chord Bass Melody

Chord-Bass Melody evaluates how smoothly the bass moves between chords, scoring higher when it travels **step-wise, ascending or descending**, instead of jumping directly between root position chords.

