
On Identifying Folk Song Melodies Employing Recurring Motifs

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Field Work in The Netherlands



At the Meertens Institute (Amsterdam):

Onder de groene linde: c. 7000 recordings.

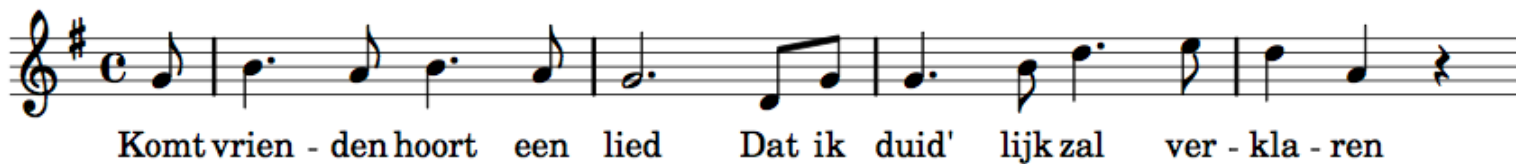
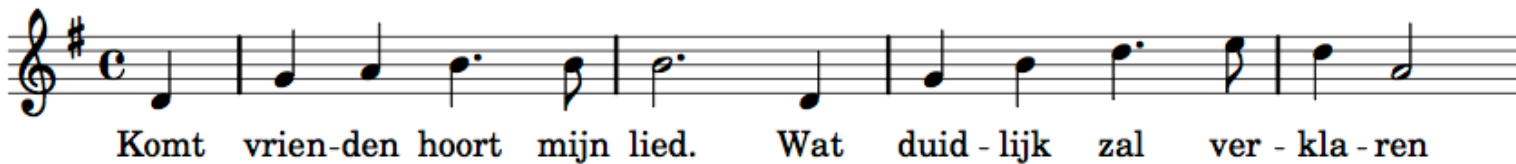
Recorded 1950s – 1980s by Will Scheepers and Ate Doornbosch.



Folk Song Melodies



Folk Song Melodies



Annotation of Motifs

Record 70360 - Strophe 1

Komt vrien-den hoort mijn lied. Wat duid-lijk zal ver-kla-ren

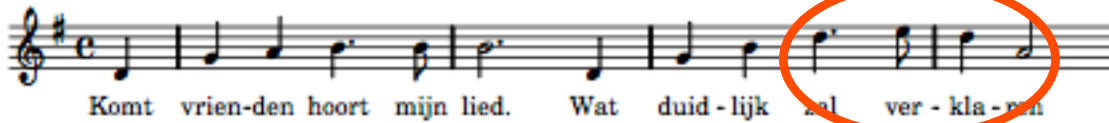
Wat een maal is ge-schied voor meer dan dui-zend ja-ren

Toen 't oud en grijs Sta - vo - ren nog bloed' op Frieslands grond

En van zijnmachtdeed he - ren De he - le we - reld rond.

Annotation of Motifs

Record 70360 - Strophe 1

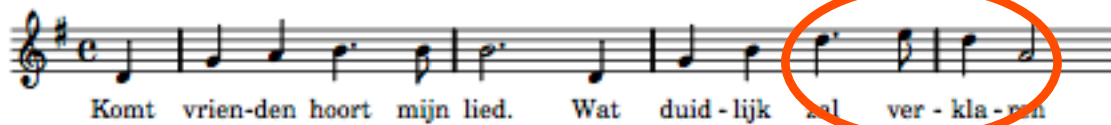


Record 71227 - Strophe 1

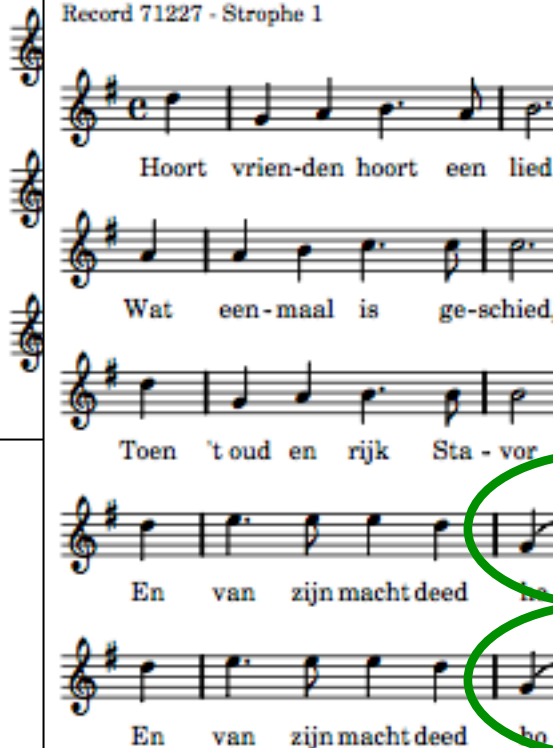


Annotation of Motifs

Record 70360 - Strophe 1



Record 71227 - Strophe 1



Record 70693 - Strophe 1



Annotation of Motifs

Record 70360 - Strophe 1

Komt vrien-den hoort een lied, Wat duid' lijk zal ver - kla - ren

Komt vrien-den hoort mijn lied.

Record 71227 - Strophe 1

Hoort vrien-den hoort een

Wat een-maal is ge-schied. Voor meer dan dui - zend ja - ren

Toen 'toud en rijk Sta - vo - ren nog bloed' op Frieslands grond

En van z'nmachtdeed ho - ren. Tot heel de we - reld rond.

Wat een-maal is ge - schied Voor meer dandui - zend ja - ren

Toen oud en grijs Sta - vo - ren Nog bloed' op Fries - landsgrond

En van zijnmachtdeed ho - ren. Door heel de we - reld rond.

En van zijnmachtdeed ho - ren door heel het we - reld - rond.

Inventory of Annotated Motifs

Rhythmic Syncope

Repercussion

Unaccented Final

V-I Upbeat

Tritone Leap

Broken Chord

Leaps

Leap before Final

Big Leap

Long Notes

Ends on Third

Ascending Line

Descending Line

Peak

Trough

Detected Motifs: Example

NLB072237_01

The image displays three staves of musical notation in treble clef, each with various motifs labeled above or below the notes. The first staff is labeled 'NLB072237_01' on the left. The motifs detected on the first staff are: 'BigLeap' (above the first two notes), 'VIUpbeat' (above the third note), 'Repercussion' (above the fourth note), 'BrokenChord' (above the fifth note), 'Leaps' (above the sixth note), 'BigLeap' (above the seventh note), 'TopNote' (above the eighth note), and 'Repercussion' (above the ninth note). The second staff has motifs: 'Leaps' (above the first note), 'TopNote' (above the second note), 'BottomNote' (below the third note), 'Leaps' (above the fourth note), 'VIUpbeat' (above the fifth note), 'BigLeap' (above the sixth note), 'Repercussion' (above the seventh note), and 'AscendingLine' (above the eighth note). The third staff has motifs: 'BrokenChord' (below the first note), 'Leaps' (below the second note), 'AscendingLine' (below the third note), 'Repercussion' (above the fourth note), 'BigLeap' (above the fifth note), 'Leaps' (above the sixth note), and 'LeapBeforeFinal' (above the seventh note). The motifs are numbered 0, 1, 2, and 3, corresponding to the staves.

0 VIUpbeat

BigLeap

Repercussion

BrokenChord

Leaps

BigLeap

TopNote

1 Repercussion

BottomNote

Leaps

TopNote

2 VIUpbeat

BigLeap

Repercussion

AscendingLine

BrokenChord

Leaps

AscendingLine

3 Repercussion

BigLeap

Leaps

LeapBeforeFinal

Detected Motifs: Example

NLB072237_01

The image displays three staves of musical notation in treble clef. The first staff is labeled 'NLB072237_01' and contains a sequence of notes with various motifs labeled above them: '0 VIUpbeat', 'BigLeap', 'Repercussion', 'BrokenChord', 'BigLeap', 'TopNote', '1', and 'Repercussion'. The second staff continues the sequence with motifs: 'Leaps', 'TopNote', '2', 'VIUpbeat', 'BigLeap', 'Repercussion', and 'AscendingLine'. The third staff shows motifs: '3', 'Repercussion', 'BrokenChord', 'BigLeap', 'Leaps', and 'LeapBeforeFinal'. Red horizontal lines are drawn under the 8th, 10th, and 14th items in the list to the right.

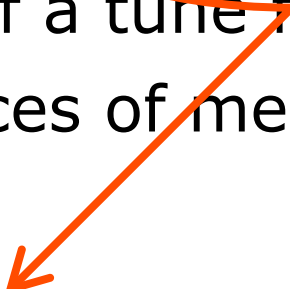
1. VIUpbeat
2. BigLeap
3. Repercussion, BrokenChord
4. Leaps
5. BigLeap
6. BigLeap
7. Peak
8. Repercussion
9. Peak
10. Leaps
11. VIUpbeat
12. BigLeap, BottomNote
13. Repercussion
14. AscendingLine
15. Repercussion
16. Leaps, BrokenChord
17. BigLeap, AscendingLine
18. Leaps
19. LeapBeforeFinal

Main Question

Can folk song melodies automatically be identified as member of a tune family solely based on the occurrences of melodic motifs?

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Computational approach: test the hypothesis
on a large amount of data

