

Continuous
Access
To
Cultural
Heritage

a computer science research programme

COGITON

CATCH in Context, 14 December 2012

NW

Jan van Balen, Dimitrios Bountouridis, Maarten Brinkerink, Martine de Bruin, Ashley Burgoyne, Louis Grijp, Esther Herder, Henkjan Honing, Peter van Kranenburg, Johan Oomen, Anja Volk, Frans Wiering, Remco Veltkamp




COGITON

**COgnition Guided
Interoperability beTween
Collections of musical Heritage**

- Cognition:
 - Locate the hooks in songs (cognitive itch)
 - Better searching, better thumbnails
- Computer science:
 - Audio segmentation and feature extraction
 - Matching and searching
- Cultural heritage:
 - folks songs (Liederbank, Meertens Institute)
 - popular songs (early radio broadcasting, Sound&Vision)

COGITCH Research Question: Hooks

- Which are candidate 'hooks' of a melody, fragment of melody most people remember
 - Design of an annotation framework




```


graph LR
  A[MI + S&V Music] --> B((ITCH Tool))
  B --> C[Hook Model]
  
```


COGITCH Research Question: Hooks

CAN YOU FOOL THEM?

Marilyn Monroe
Diamonds Are a Girl's Best Friend




THE VERY BEST OF




Which spot is harder?

Send it to a friend.


Send it to everybody!


WHAT'S PLAYING?



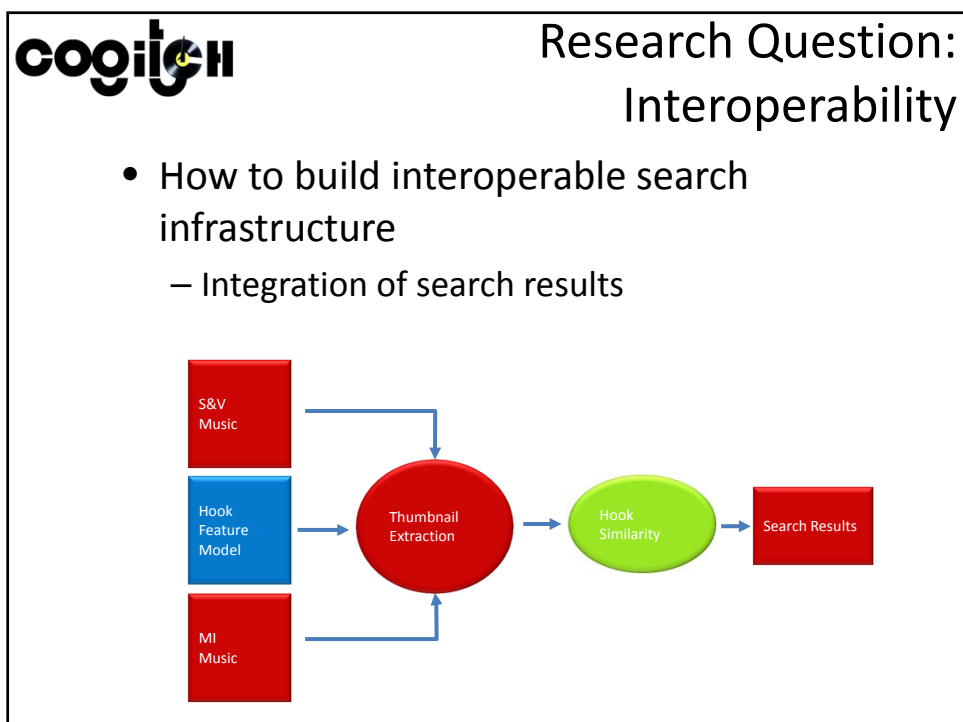
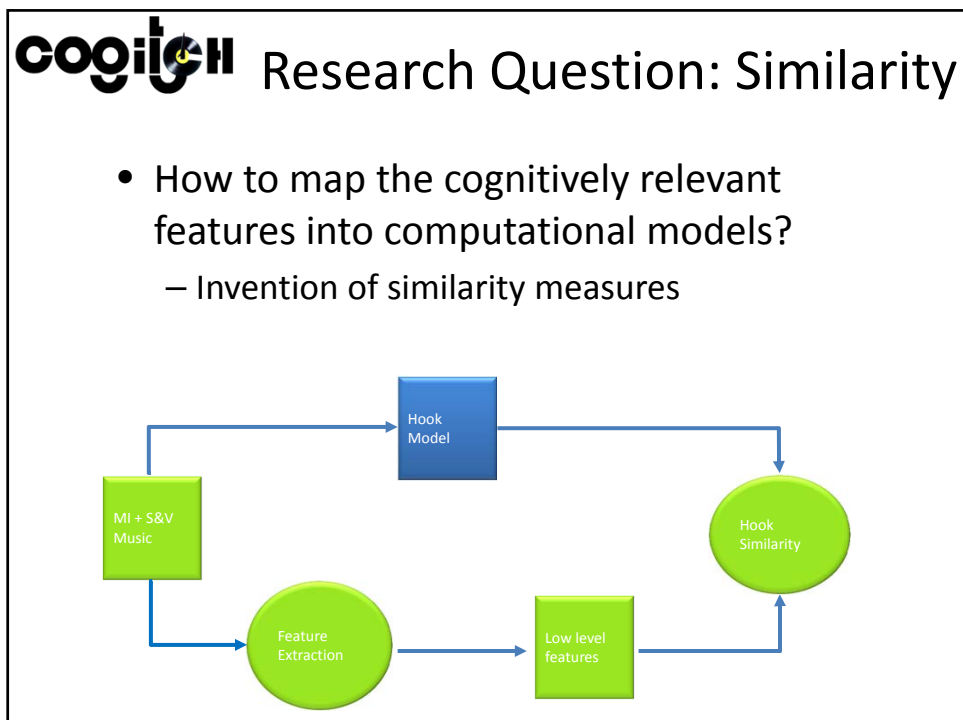
Pause once you recognise the song.

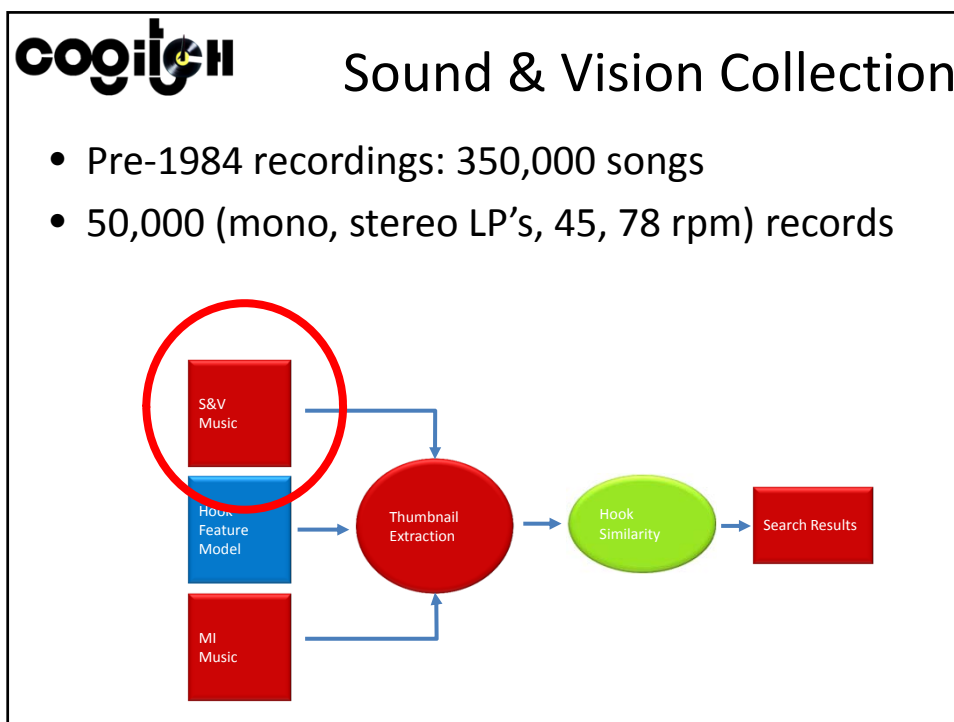
WHAT COMES NEXT?





I don't know the song.





coigit Meertens Collection

- Liederensbank/Dutch Song Database: 150,000 songs

```

    graph LR
      S[MI Music] --> T((Thumbnail Extraction))
      H[Hook Feature Manager] --> T
      S2[S&V Music] --> T
      T --> S2((Hook Similarity))
      S2 --> R[Search Results]
  
```

The diagram illustrates a search pipeline. On the left, three input boxes are stacked: 'S&V Music' (top, red), 'Hook Feature Manager' (middle, blue), and 'MI Music' (bottom, red). The 'MI Music' box is circled in red. Arrows from all three boxes point to a central red circle labeled 'Thumbnail Extraction'. An arrow from this circle points to a green oval labeled 'Hook Similarity', which then points to a final red rectangle labeled 'Search Results'.

coigit Meertens Collection

The screenshot shows the website's header with navigation links: Home, Content, Browsing, Search Tips, FAQs, Progress, Disclaimer, and Meertens Institute. The main heading is 'Dutch Song Database' with a 'stanza search' option. Below the heading is a search interface with a search box, a 'search' button, and dropdown menus for 'AND', 'all words', and 'sort by year'. A small image of a man and a woman is visible on the left side of the page.

The Dutch Song Database
 version 2.0 (march 2008) / last update: September 3, 2012

The Dutch Song Database (Nederlandse Liederensbank in Dutch) contains more than 150,000 songs in the Dutch and Flemish language, from the Middle Ages through the twentieth century. It contains love songs, satirical songs, Beggar songs, psalms and other religious songs, folksongs, children's songs, St Nicholas and Christmas songs, and so on and so forth. The main sources for all these songs are songbooks, songsheets (broadsides), song manuscripts and fieldwork recordings. For every song the source is indicated where the text and/or the melody can be found. In some cases one can click directly to the complete text, or to the music, or to a recording. The Dutch Song Database was compiled at the Meertens Institute in Amsterdam and is maintained and developed further by its Centre for Documentation and Research of Dutch Songs, in cooperation with several partners.

```

    graph LR
      H[Hook Feature Manager] --> T((Thumbnail Extraction))
      M[MI Music] --> T
      T --> S2((Hook Similarity))
      S2 --> R[Search Results]
  
```

The diagram illustrates a search pipeline. On the left, two input boxes are stacked: 'Hook Feature Manager' (top, blue) and 'MI Music' (bottom, red). The 'MI Music' box is circled in red. Arrows from both boxes point to a central red circle labeled 'Thumbnail Extraction'. An arrow from this circle points to a green oval labeled 'Hook Similarity', which then points to a final red rectangle labeled 'Search Results'.

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Baseline measurement

- Working definition of hook
- State of the art in segmentation
- Search for overlap, 160 records being digitized

- Is there interference (mutual influence) between Folk and Popular Music?

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Nijmegen, ± October 1925

Liederencourant, Firma Rombouts, Roosendaal

COOITGH

Een laffe moord te Rotterdam.

Woorden van M. M. Bal, Heveadorp,
Melodie: Jantje aan de telefoon.

Wat men nu hoord,
't is weer een moord,
Geplesed in de havenstad.
Een klein jong kind,
Rein en bemind,
Dat oit geen kwaad gedaan had.
Wie is hiervan de dader?
Men verdenkt hiervan de Vader.

Refrain voor elk couplet.

Dat er menschen zijn op aarde,
Ja zoo laf en zoo gemeen.
Die moordenaar,
't is een barbaar,
Verban hem naar Siberie heen.
En anders moeten zij trekken,
Met paarden hem van elkaar.
Zoo moesten zij hem uitrekken,
Die laffe moordenaar.

Hoe of het kan,
Dat hij als man,
Zoon lief en aardig poppe,
Zoo lief en rein,
't Mocht niet zoo zijn
Haar smijte met haar kopje.
Haar gooide tegen de muren,
Moordenaar gij zult 't bezuren.

Nu denkt hij wel
Ginds in zijn cel
Aan zijn lief dochtertje klein.
Zij was een pop
Hang hem maar op
Of maakt hem tot gehakt sijn.
Waarom moest dit gebeuren,
Velen zullen er om treuren.

COOITGH

Search for overlap

Nederlandse Liederensbank strofezoeken

zoek EN alle woorden sorteer op jaar

U zocht:
alle liederen op deze melodie.

5 resultaten

beginregel auteur titel bron	wijsaanduiding standaardnaam melodie strofeschema	muz. mp3 scan
Wat men nu hoord / 't is weer een moord Bal, M.M. Een Laffe moord te [...] Lbi Moormann K064 (1925) [nr. 13]	Jantje aan de telefoon Jantje aan de telefoon	scan
Wat men nu hoord, / 't is weer een moord Bal, M.M. (Heveadorp) Een laffe moord te [...] Lbi MI Wouters 319 (1925+) (okt. 1925)) [nr. 13]	Jantje aan de telefoon Jantje aan de telefoon a a b c c b d d + D E F F E G F G F	scan
Zeg Paatjelijf, waar is Moe, / Ik zie haar al in [...] Jantje aan de telefoon Lbi Moormann K027 ([1926 c.]) [nr. 5]	[wijsaanduiding: ontbreekt] Jantje aan de telefoon	scan
Het is stil in huis / Zonder gedruisch Jantje aan de telefoon Lbi Moormann M282 (1930 c.) [nr. 1]	[wijsaanduiding: ontbreekt] Jantje aan de telefoon	scan
Wat men nu hoort / 't is weer een moord Bal (Heveadorp), M. M. Een laffe moord te [...] Lbi KB Wouters 06108 (1930 ca.) [nr. 1]	Jantje aan de telefoon Jantje aan de telefoon .2A.2A.3B.2C.2C.3B.3d 4d	scan

Search for overlap



Duo Hofmann
78 rpm record "Jantje aan de telefoon"
Not yet digitized

Interoperability

- An important part of Dutch musical heritage is not available for scholars nor for the general public:
 - Willy Derby
 - Lou Bandy
 - Louis Pisuise
 - Kees Pruis
 - Louis Davids
 - Duo Hofmann



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Interoperability Pilot Project

- Demo