

The Musical Brain

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Mozart and the Power of Music: **Memory**, Myth & Magic

Prof. Jane Ginsborg
Centre for Music Performance Research

Henri Pousseur (1929-2009)

Miroir de Votre Faust
(Caractères II)

1. Le tarot d'Henri
(piano solo)
2. La chevauchée
fantastique (piano
and voice)



La chevauchée fantastique

www.youtube.com/watch?v=QdpzmgtIHr4

RNCM



There was a king in
Thule,
So faithful to the grave.
His love, when she was
dying,
a goblet of gold him gave.

He used to love it deeply,
And always drank from it.
His eyes they filled with
tears...

La chevauchée fantastique



Deep down into the
waves.

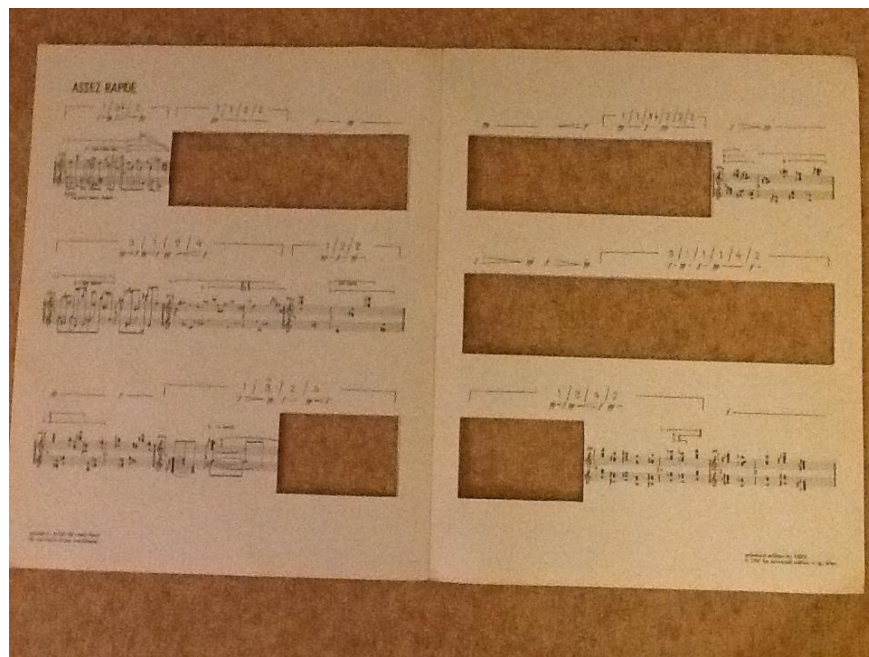
He watched it fall, and
drinking
it sank deep into the sea.
He closed his eyes
forever,
And never drank
a drop more.

Henri Pousseur (1929-2009)

Miroir de Votre Faust
(Caractères II)

1. Le tarot d'Henri
(piano solo)
2. La chevauchée
fantastique (piano
and voice)
3. Souvenirs d'une
marionette (piano
and voice *ad lib.*)





ASSEZ RAPIDE

Handwritten musical score on two pages, showing the same piece as the first image but with the redactions removed. The notation is more complete, showing various time signatures and musical notes across multiple systems.



Memorising processes (for this work)

1. Associate each cue from the piano part with appropriate entry for singer
 - By repeating cue + entry until cue functions as trigger for entry
2. Develop “content-addressable” memory so as to be able to jump from one section to another

Kiri te Kanawa: *Dove sono* Metropolitan Opera Centennial 1983



Cs. *da - ro i giu - ra - men - ti di quel lab - bro - men - so - gner!*
 vow'd me love true and ten - der, *Ob.* Ah those lips are now for - sworn!

Fag. Hb.

Allegro 4.30

Cs. *Ah! seal - men la mia co - stan - za nel lan - gui - re a - man - doo.*
 Ah! per - haps my constant year - ning, And these bit - ter tears that

Str. p

Cs. *gnor, mi por - lus - sen - na spe - ranza di can - giar l'in - gra - to cor di can -*
 start, Yet will win his love re - turning, And re - store th'un - grate - ful heart, and re -

Ob.

5.28

Cs. *giar - l'in - gra - to cor!*
 store th'un - grate - ful heart, 4.55

Ob.

Tutti f

p Fag.

Cs. *Ah! seal - men la mia co - stan - za,*
 Ah! Per - haps my con - stant year - ning,

Str.

Hb.

Tutti

Cs. *ah! seal - men la mia co -*
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Hb.

Cs. *stan - za nel lan - gui - re a - man - doo - gnor, mi por - lasse - na spe -*
 yearning, and these bit - ter tears that start, Yet may win his love re -

Cs. *ran - za di can - giar l'in - gra - to cor, mi por - tas - se u - na spe -*
 tur - ning, And re - store th'un - grate - ful heart, Yet may win me his love re -

Ob.

Fag. Hb.

5.36 di con -

Cs. *stan - za*
ran - za di can - giar l'in - gra - to cor, di can -
 turn - ing, 5.34 and re - store th'un - grate - ful heart, and re -

Ob.

Fag. Hb.

Str.

Cs. *giar - l'in - gra - to cor, di can - giar l'in - gra - to*
 store th'un - grate - ful heart, and re - store th'un - grate - ful

Ob.

Str.

Hb.

da - ro i giu - ra - men - ti di quel lab - bro - men - so - gner!
 vow'd me love true and ten - der, Ah those lips are now for - sworn!

Ob.
 Fag. Hb.

Allegro 4.30

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 Ah! per - haps my constant yearn - ing, And these bit - ter tears that

Str. p

gnor, mi por - lus - sen - na spe - ranza di can - giar l'in - gra - to cor di can -
 start, Yet will win his love re - turning, And re - store th'ungrateful heart, and re -

Ob.
 Hb.

5.28

giar l'in - gra - to cor!
 store th'un - grate - ful heart,

Ob.
 Fag. Hb.

Tutti f

4.55

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Str.
 Hb.

Tutti

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Ob.
 p Fag.
 Str.
 Hb.

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ran - za di can - giar l'in - gra - to cor, mi por - tas - se u - na spe -
 tur - ning, And re - store th'un - grate - ful heart, Yet may win me his love re -

Ob.
 Fag. Hb.

5.36 di con -

stan - za
 ran - za di can - giar l'in - gra - to cor, di can -
 turn - ing, and re - store th'un - grateful heart, and re -

Ob.
 Fag. Hb.
 Str.

5.34

giar l'in - gra - to cor, di can - giar l'in - gra - to
 store th'ungrateful heart, and re - store th'un - grate - ful

Ob.
 Str.
 Hb.

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 Hb.

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 Ah! per - haps my con - stant

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 p Fag.
 Str.
 Hb.

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 yearning, and these bit - ter tears that start, Yet may win his love re -

ran - za di can - giar l'in - gra - to cor, mi por - tas - se u - na spe -
 tur - ning, And re - store th'un - grate - ful heart, Yet may win me his love re -

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Ob.
Fag. Hb.
Tutti f

Ah! seal - men la mia co - stan - za,
Ah! Per - haps my con - stant yearn - ing,

Str.
Hb.
Tutti

ah! seal - men la mia co -
Ah! per - haps my con - stant

Ob.
p Fag.
Str.
Hb.

stan - za nel lan - gui - re a - man - doo - gnor, mi por - las - sen - na spe -
yearning, and these bit - ter tears that start, Yet may win his love re -

ran - za di can - giar l'in - gra - to cor, mi por - las - sen - na spe -
turn - ing, And re - store th'un - grate - ful heart, Yet may win me his love re -

Ob.
Fag. Hb.

stan - za
ran - za
turn - ing, mi can - giar l'in - gra - to cor, di can -
and re - store th'un - grateful heart, and re -

Ob.
Fag. Hb.
Str.
Bl.

giar - l'in - gra - to cor, di can - giar l'in - gra - to
store th'ungrateful heart, and re - store th'un - grate - ful

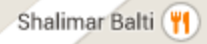
Ob.
Str.
Hb.

Kiri te Kanawa: *Dove sono* Metropolitan Opera Centennial 1983



Traffic, Bicycling, Terrain, Directions

G B Recruitment (Staffs)



Stanier St

Lower St
A34

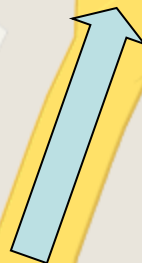
The Midway

Stanier St


Pool Dam





Lower St

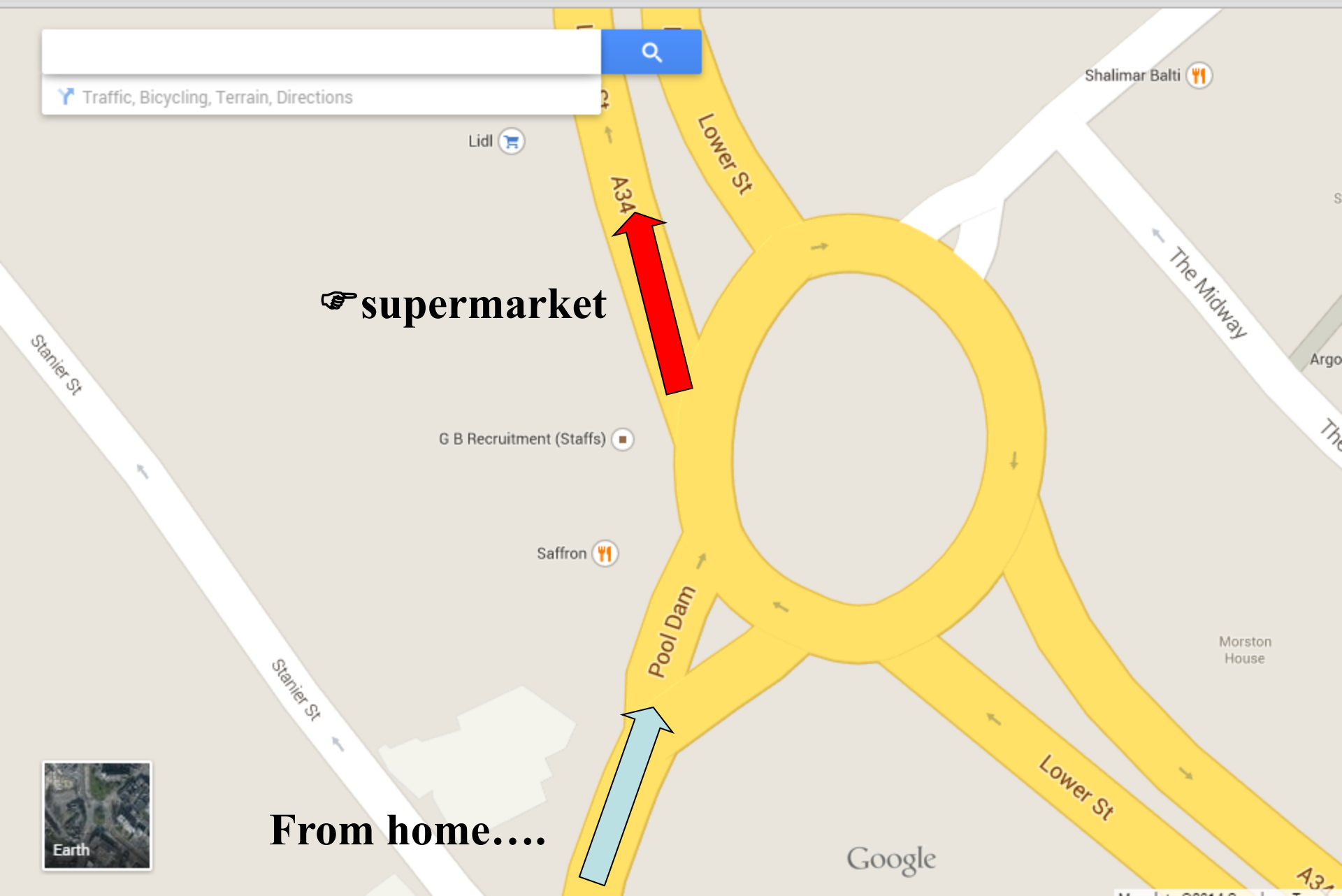
Morston House

**From home....**

Google



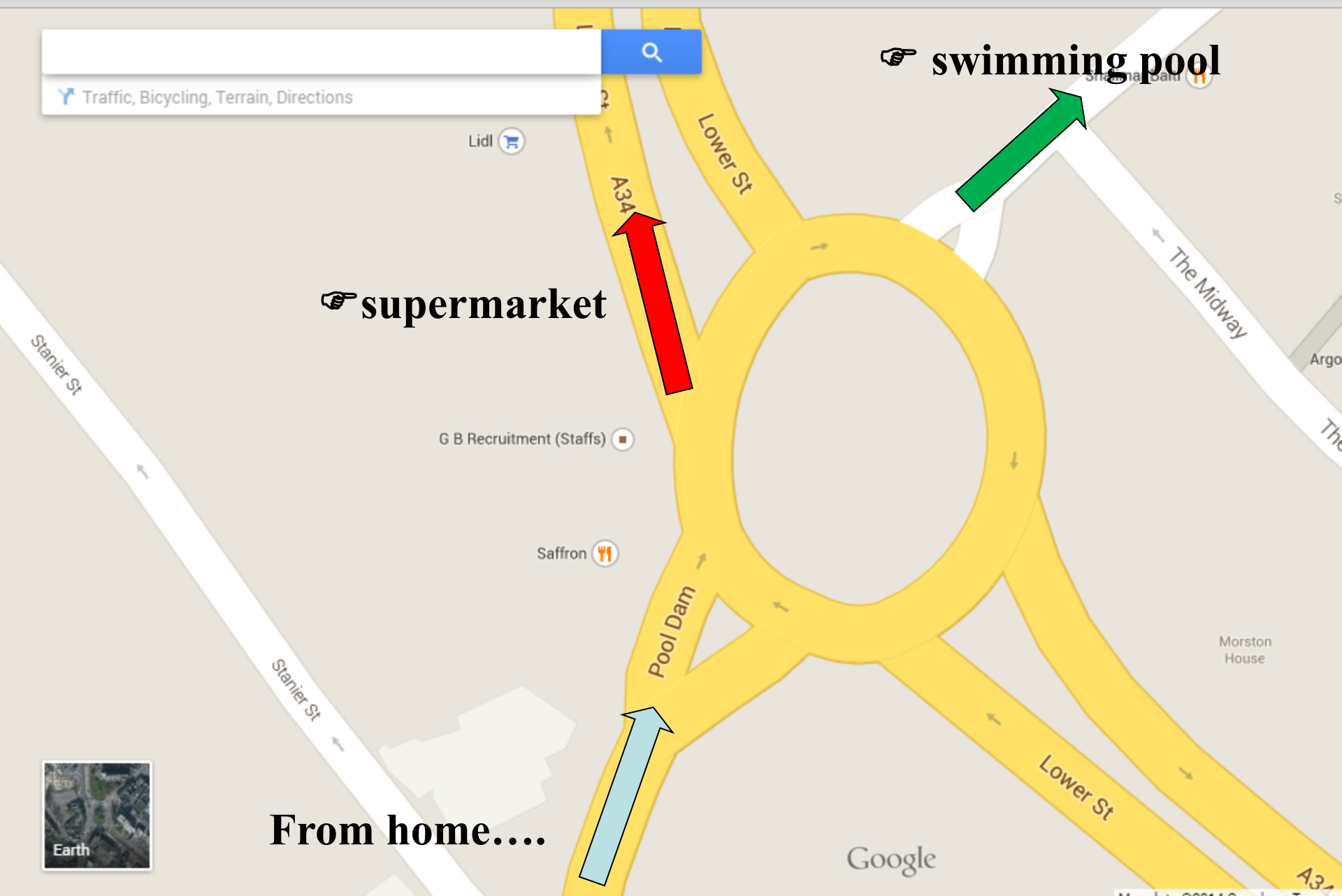
 Traffic,  Bicycling,  Terrain,  Directions



 **supermarket**

From home....



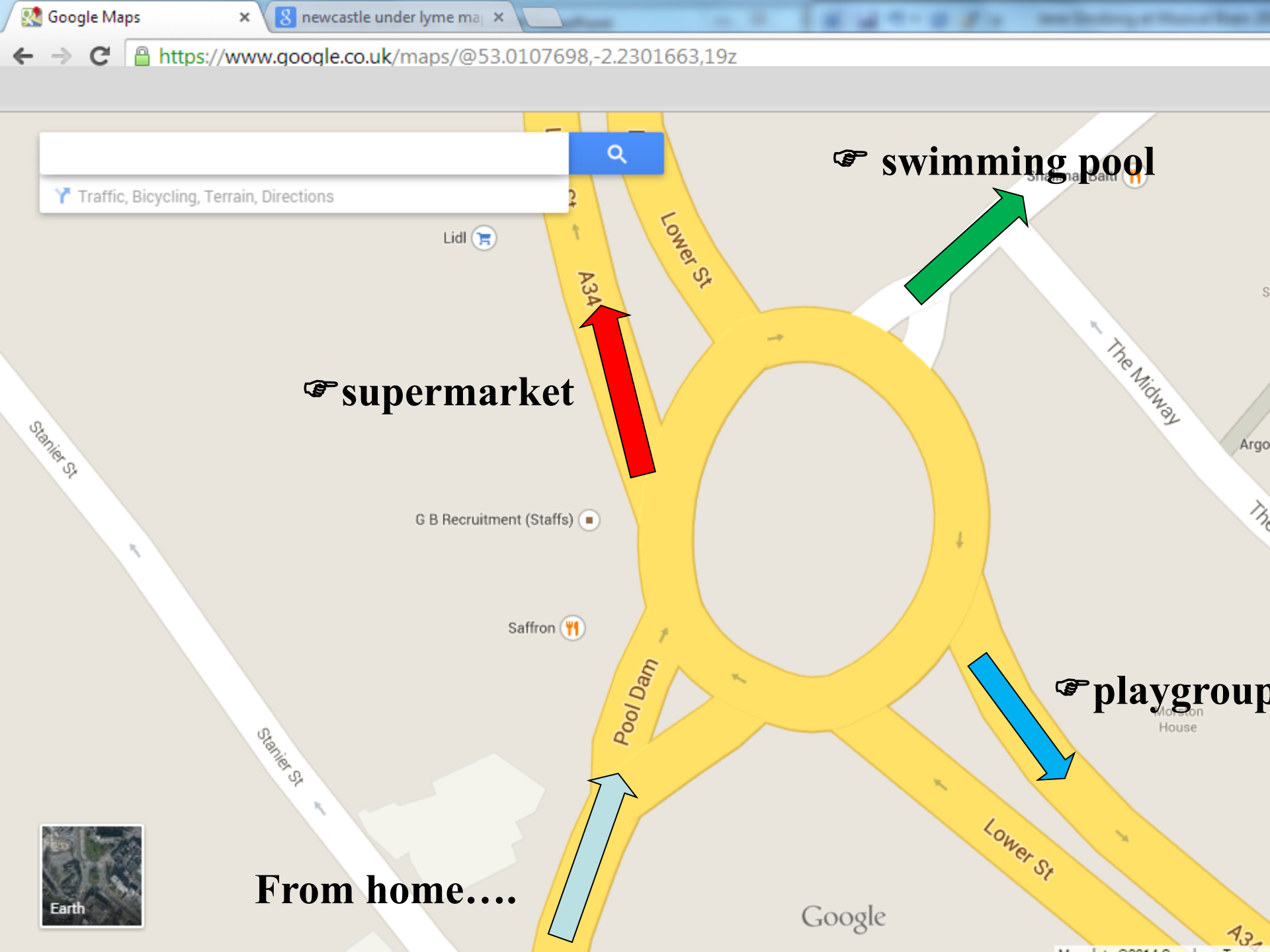


👉 swimming pool

👉 supermarket

From home....





Search bar with a magnifying glass icon and the text "Traffic, Bicycling, Terrain, Directions" below it.

👉 supermarket

👉 swimming pool

👉 playgroup

From home....





Preparing for performance from memory

- Two broad approaches to memorising
 1. Thorough learning... implicit memorisation using procedural memory (= how-to or motor memory)
 - *cf.* tying a shoelace, riding a bicycle etc.
 - → automatisatisation: performer can focus on
 - conveying music to audience
 - (or what to have for dinner)



Procedural memory

- Interaction of words and melody in memory
- *Is it better (i.e. more useful) to memorise words and melodies separately or together?*
- Interviews with expert singers suggested varied strategies e.g.
 1. Familiarisation with text of poem → relearning with melody
 2. Words and melody always together
 3. Memorising words to rhythm of melody

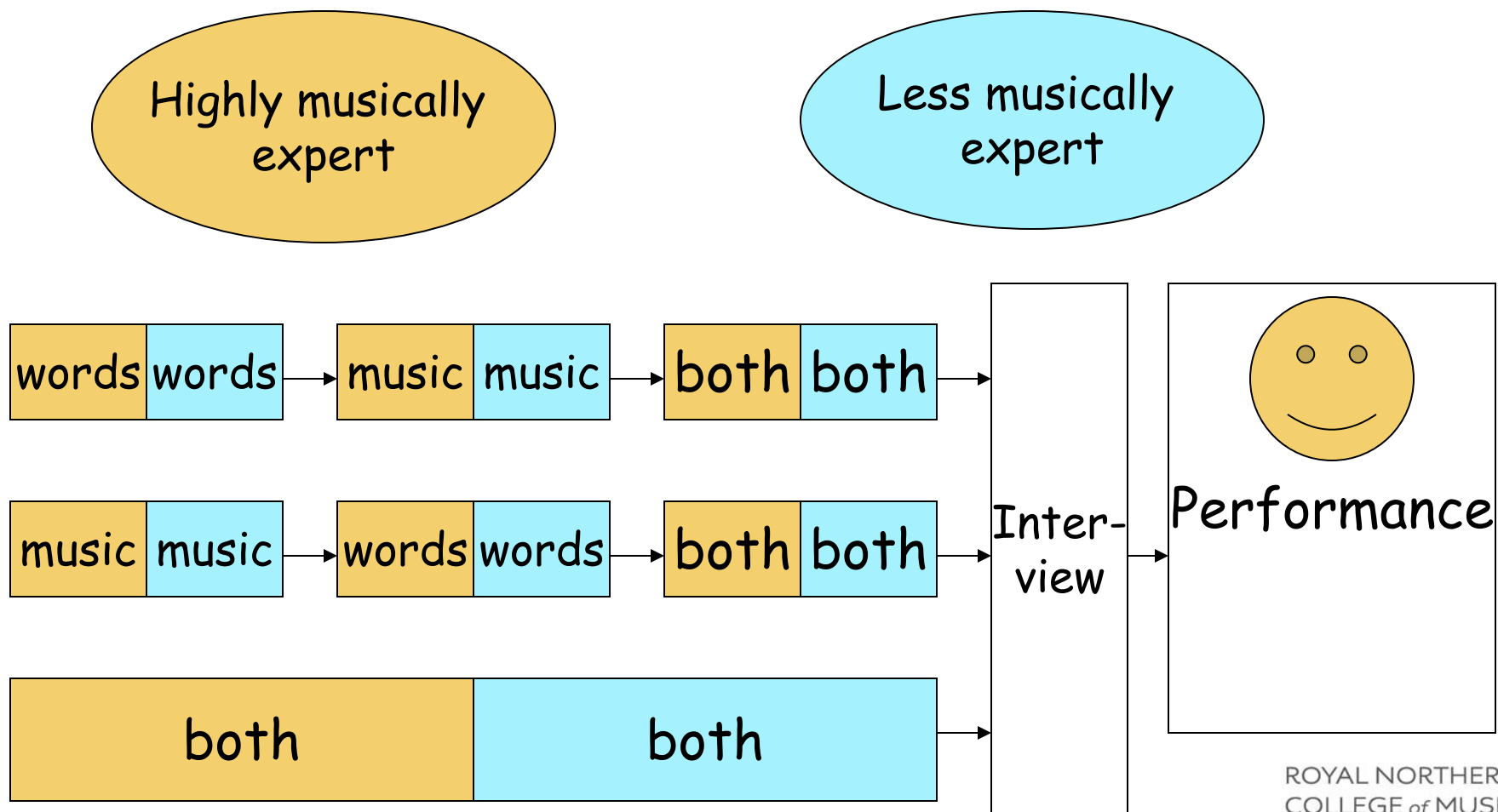
Observational study



- *Participants:* 15 student, amateur and professional singers
- *Method:* Learned and memorised same new song in six 15-minute practice sessions then performed it from memory
- *Behaviours analysed:* singing words and melody separately and together, with and without the score
- *Results:* Quickest memorisers who sang most accurately from memory started memorising earliest and always sang words and melody together

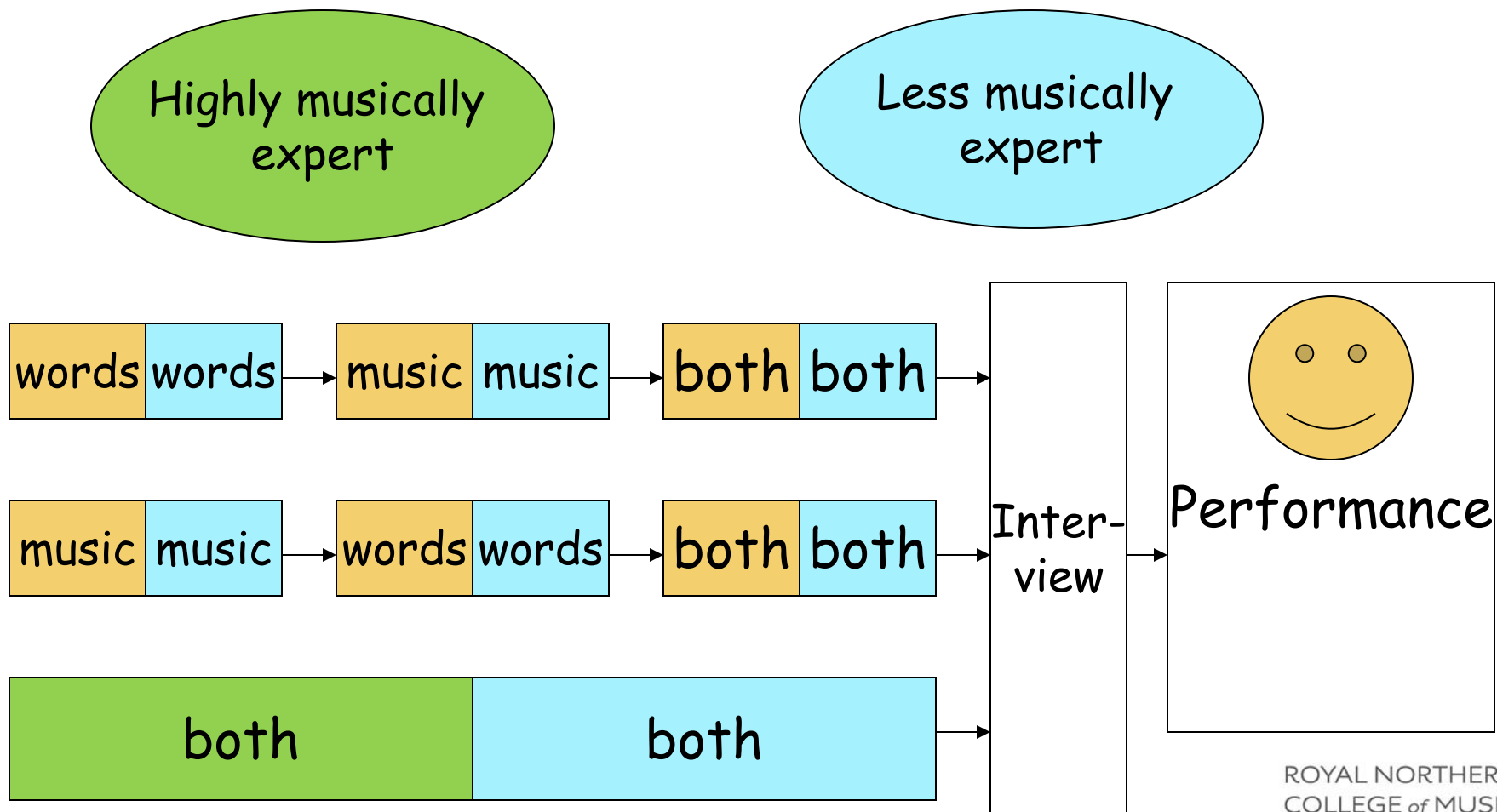
Experiment 1

Method



Experiment 1

Analyses: accuracy and fluency



Question arising...



- *How do singers learn to perform songs (etc.) in languages they neither speak nor understand?*

Experiment 2



- *Participants:* 20 expert singers
- *Method:* Memorised two songs in two sessions two weeks apart, one with semantically-meaningful words in English, the other with nonsense words (digit strings)
- *Results:* Singers were quicker to learn the songs in English but *recall* for nonsense songs was same or even better when tested in different ways
- *Conclusion:* Melody provides framework for recalling text BUT
- *Caveat:* relevant only to memorising for the purposes of “security”, not performance!



Preparing for performance from memory

- Two broad approaches to memorising
- 2. Acknowledge that rote repetition is only ONE strategy available to musicians



Other strategies

- Visual strategies for the score
- “The singer must memorise at least the turn of the page” (Anfossi, early 19th century)
- Visual cues from conductor or other musician(s)
- Auditory strategies for monitoring sound of own performance and imagining what follows
- Kinaesthetic strategies for e.g. feeling of big leap or breath needed for long note

Mental representation(s)



- Compositional structure or narrative journey
- Provides framework for visual, auditory and kinaesthetic strategies
- Depending on genre, kind of music, composer's and performer's intentions...
- Sections, phrases and switches
- And/or character, story, emotional content of text and its setting to music
- Possibility of drawing on each strategy as necessary during rehearsal and performance





And finally.....



- Thank you very much for your attention!
- Any questions?

