

A photograph of a person from the side, wearing a red long-sleeved shirt and black headphones. They are sitting in a dark room with blurred, colorful lights in the background, creating a bokeh effect.

Musikk, vertikalitet og bevegelse

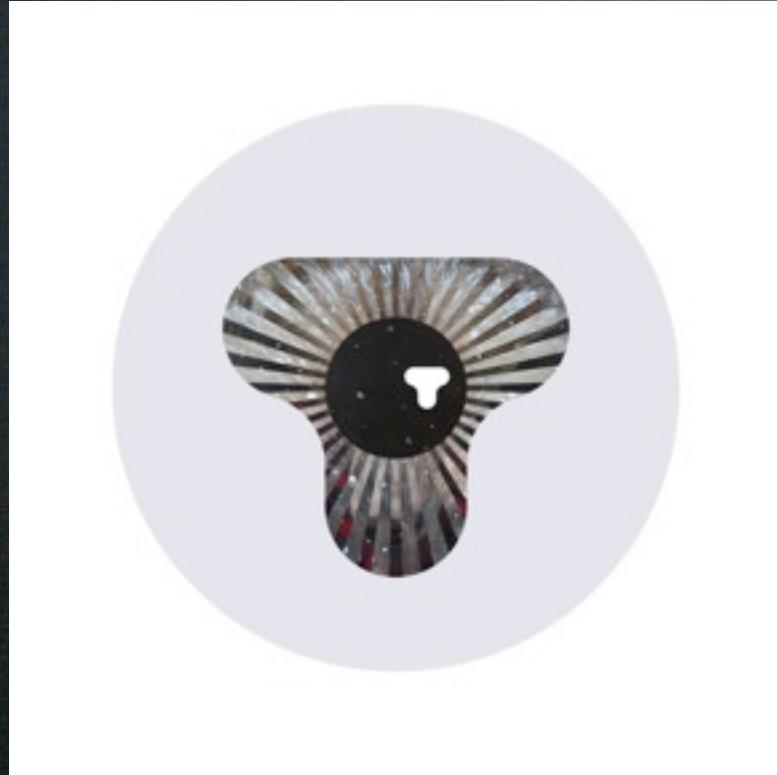
Hans T. Zeiner-Henriksen

e-mail: h.t.zeiner-henriksen@imv.uio.no



KAVEH - SNUFS m/ ONKL P

Kaveh feat. OnklP: «Snufs» (2013)
sample: Lalla Carlsen: «Kokain»

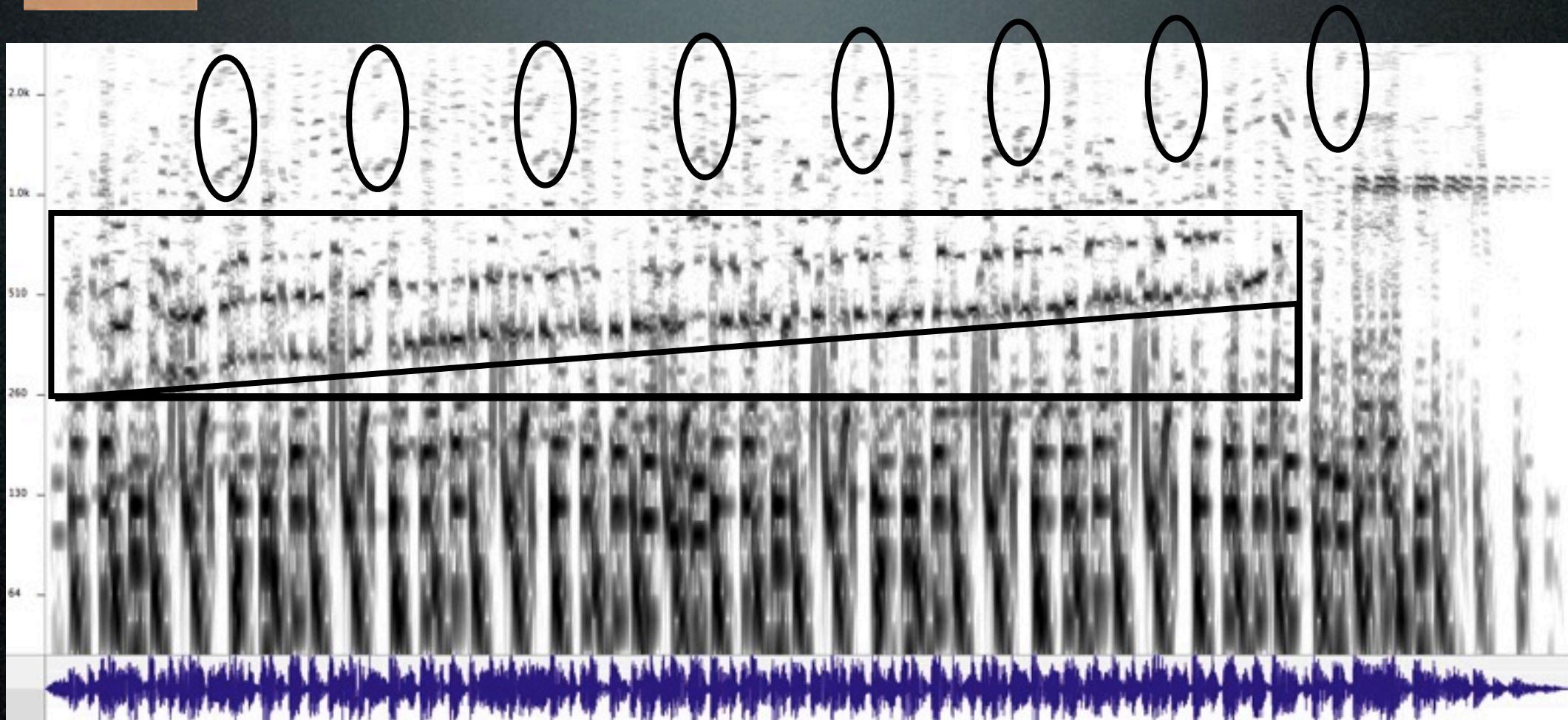


Truls: «Out of Yourself» (2013)



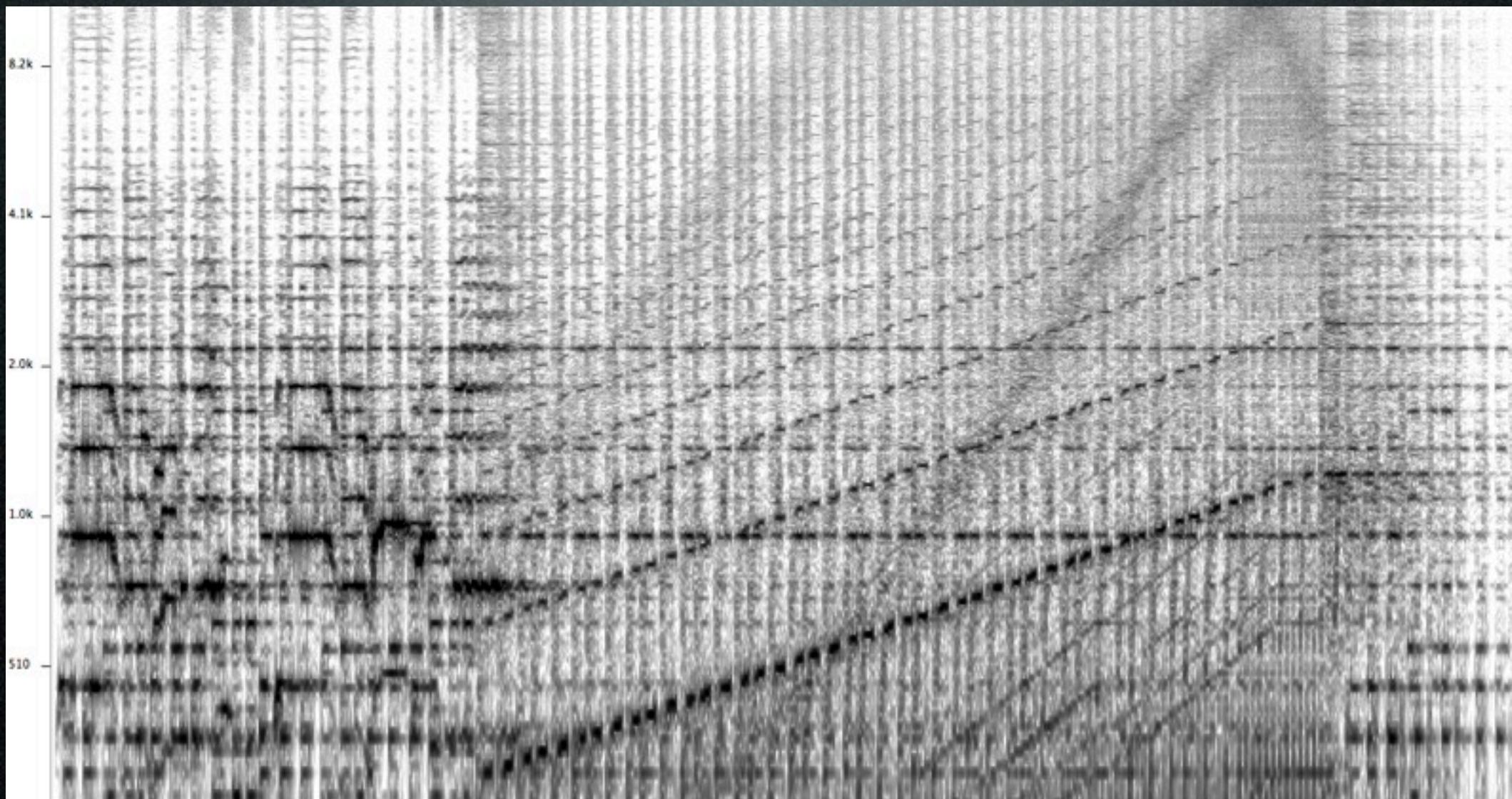


Basement Jaxx: Jump'n'Shout (1999)





Rihanna (feat. Calvin Harris): We Found Love (2012)





Wolfgang Gartner & Deadmau5:
“Animal Rights” 2010

Rain Down on Me (2003)

Stray Dogs
Thomas Duddale



Rain Down on Me (2003)

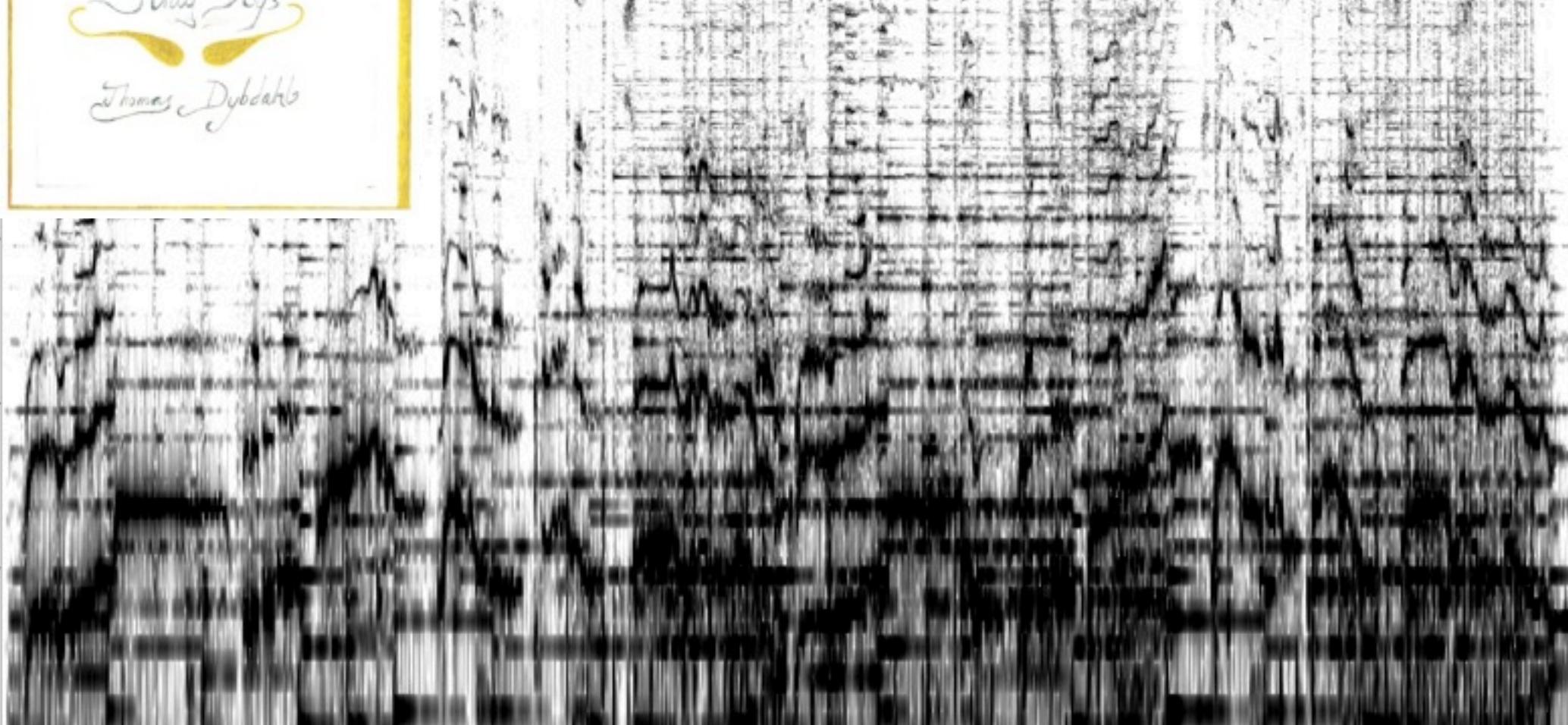
Stray Dogs
Thomas Duddale

2.0k

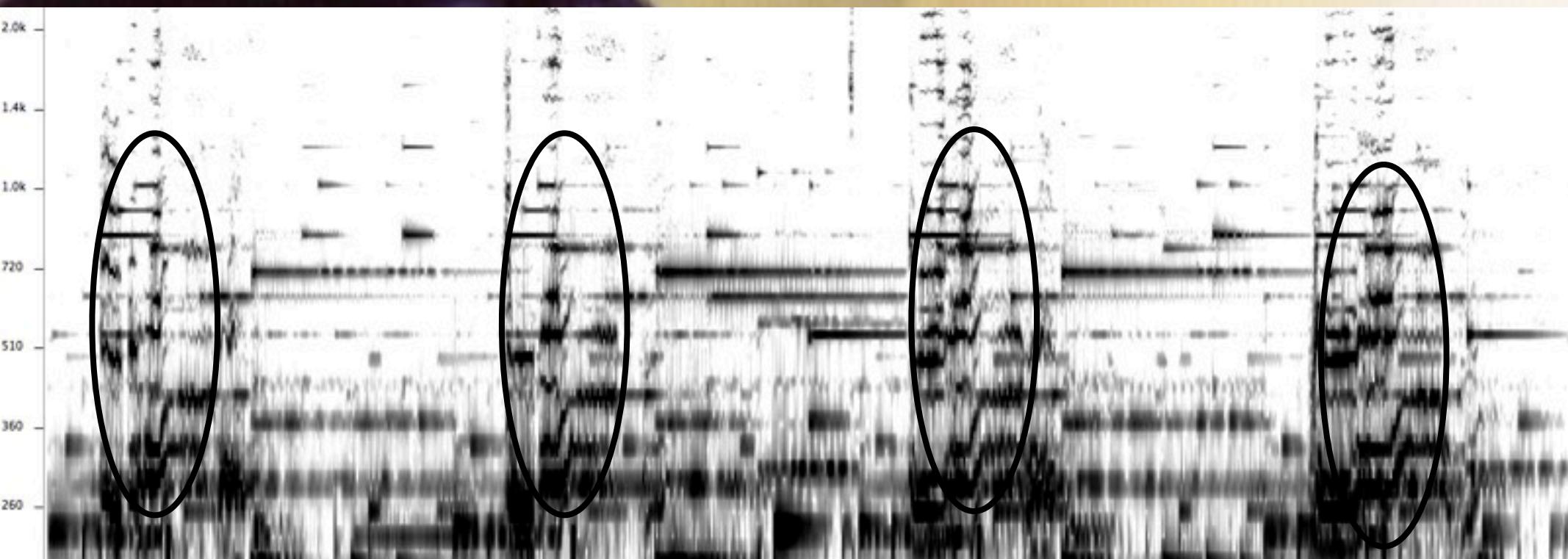
1.0k

510

260



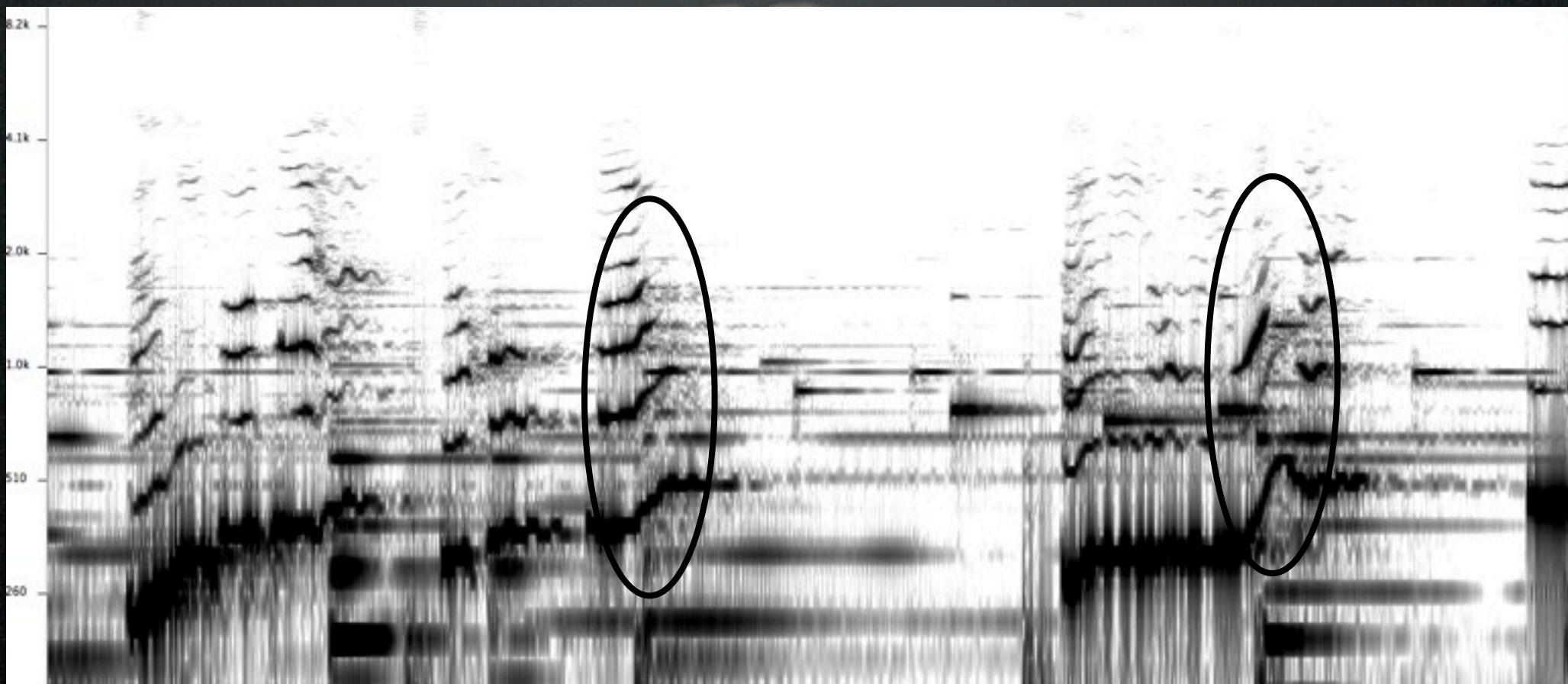
One Day You'll Dance for Me, New York City (2004)



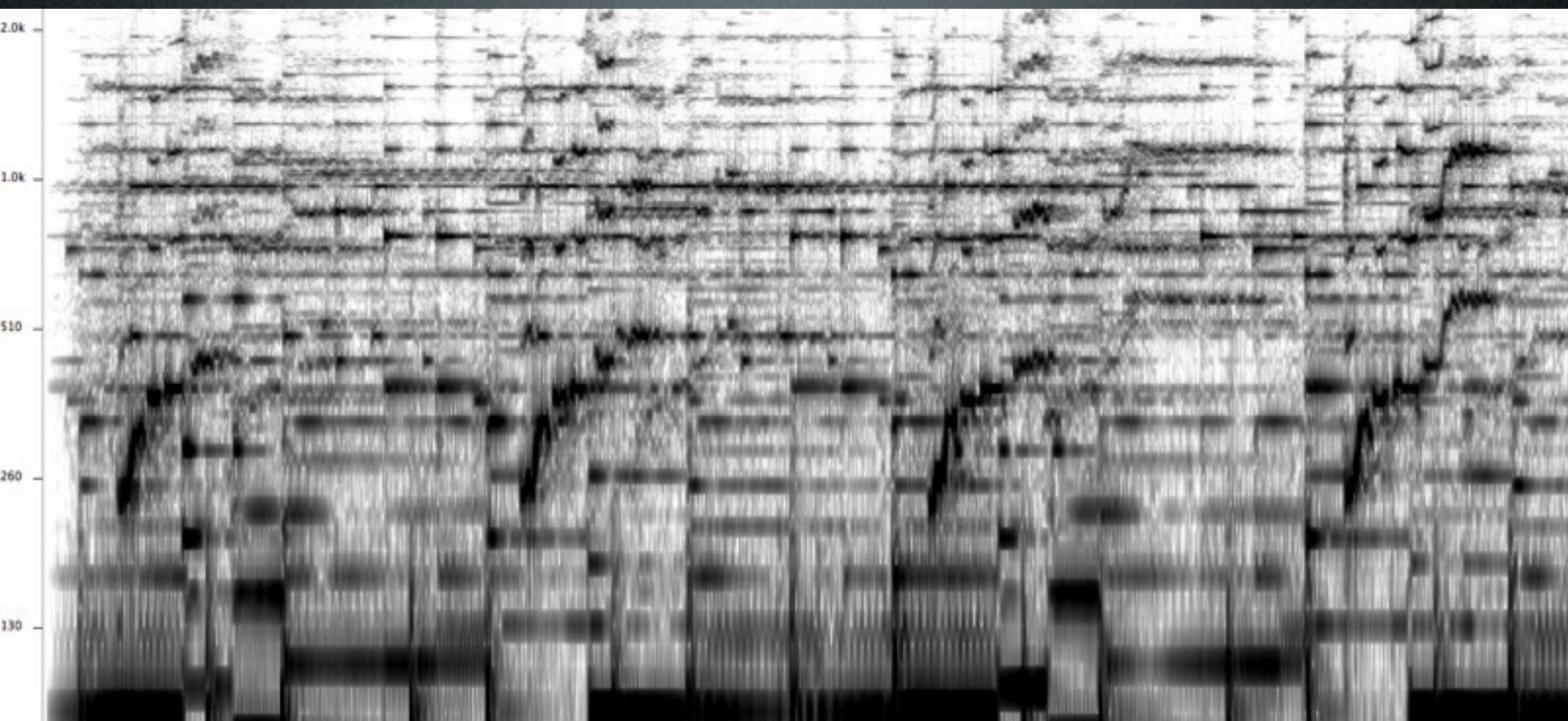
AneBrum

IT ALL STARTS WITH ONE

The Light From One

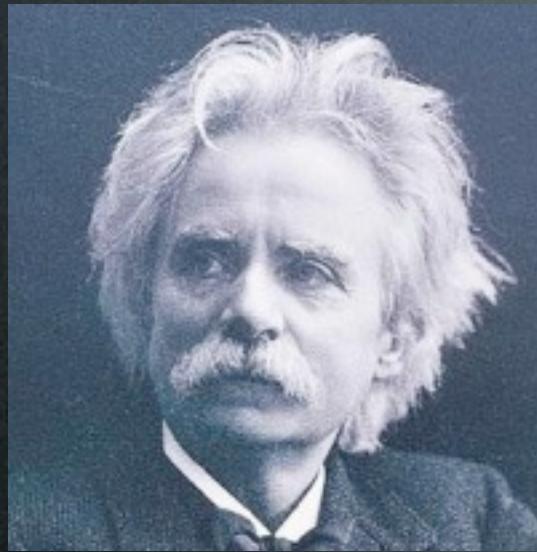


Ane Brun: «The Light from One» (2011)





Björk:
“Bachelorette” 1997



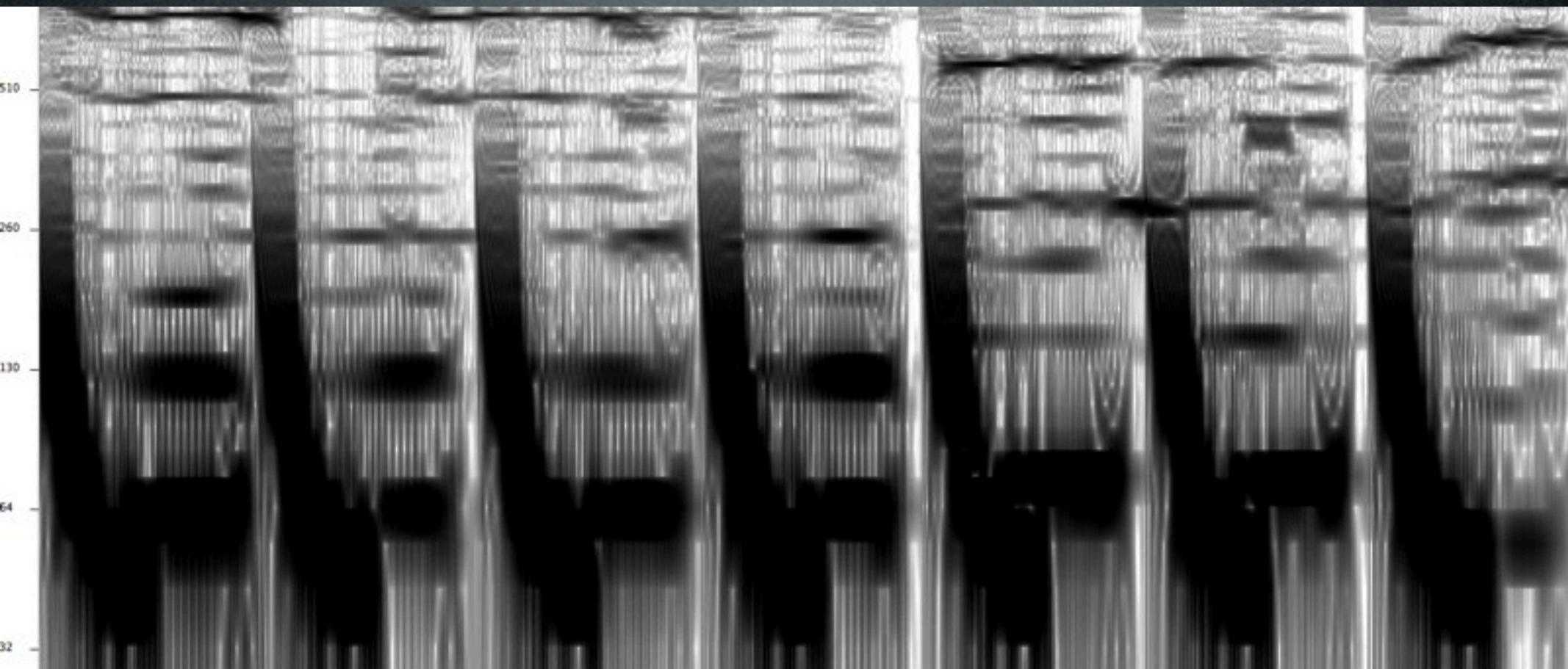
Edvard Grieg: Mor Aases død

A musical score for five staves, likely for a piano or organ. The staves are arranged vertically. The top staff is in treble clef, the second in treble clef, the third in bass clef, the fourth in treble clef, and the bottom in bass clef. All staves have a key signature of one sharp (F#) and common time. Measure numbers 'a2' are placed above the first four measures of each staff. Dynamics 'p' (piano) are indicated at the beginning of the first, third, and fifth measures. The music consists of eighth and sixteenth note patterns with various rests and grace notes.





Rihanna: «Only Girl (in the World)» (2010)



Sidechain-kompressor

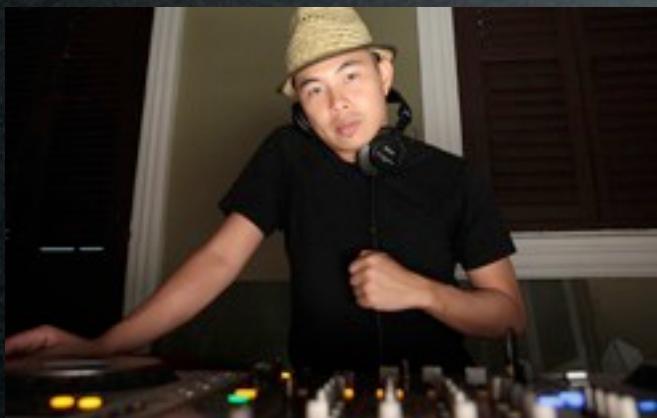


Sidechain-kompressor



Musikk som et
metaforisk språk for
menneskelig
bevegelse

Produsent/DJ → Dansere



Komponist

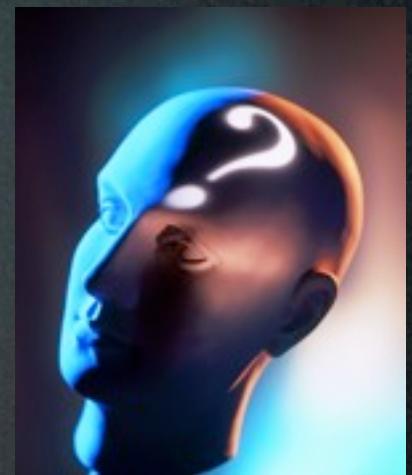


Musikk som et
metaforisk språk for
menneskelig
bevegelse

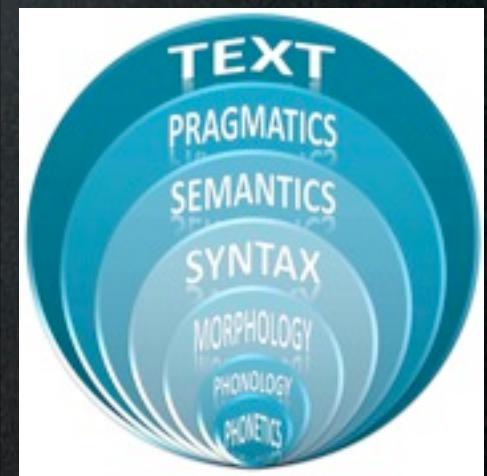
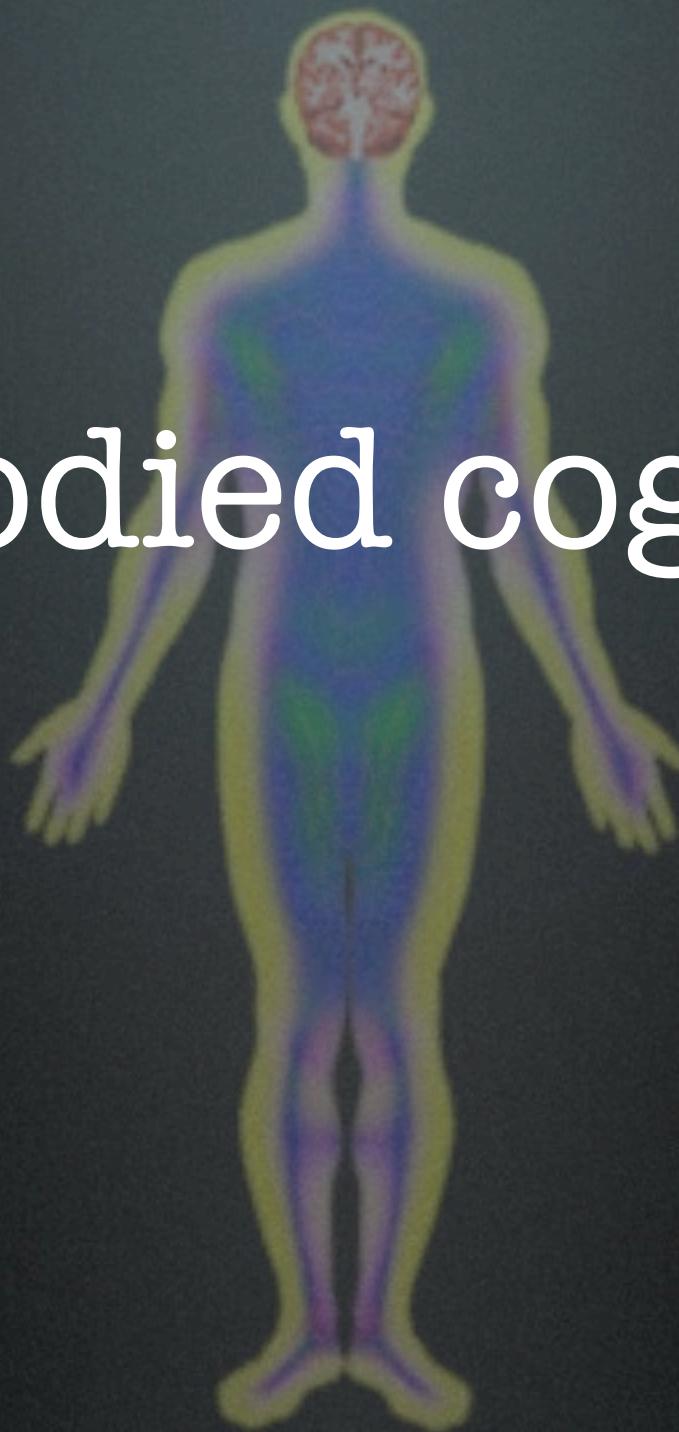
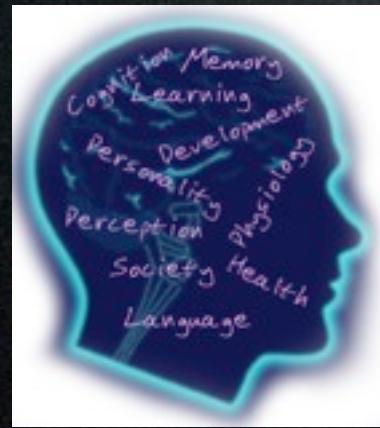


Publikum





Embodied cognition



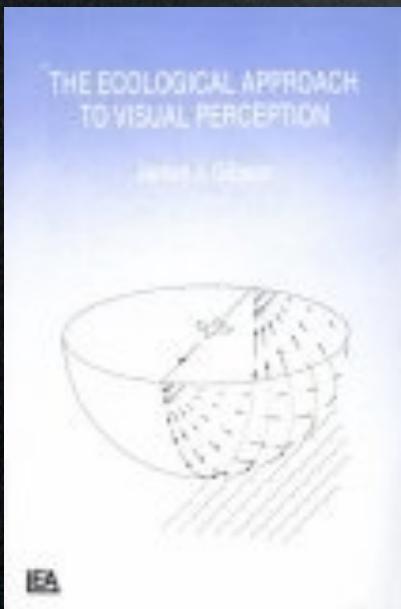
Økologi-orientert persepsjonsteori



James J. Gibson (1904-1979)

* Affordance

* Persepsjon - aksjon

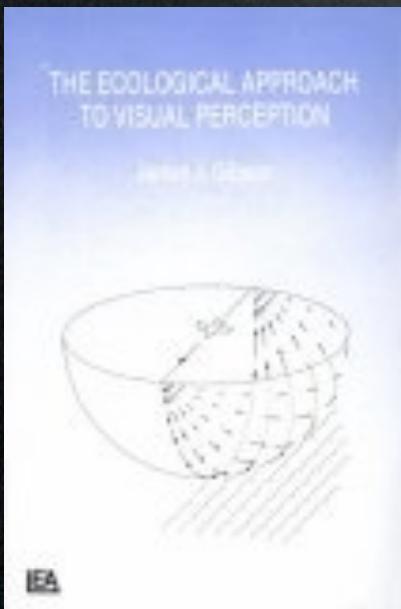


Persepsjon relatert til økologi



James J. Gibson (1904-1979)

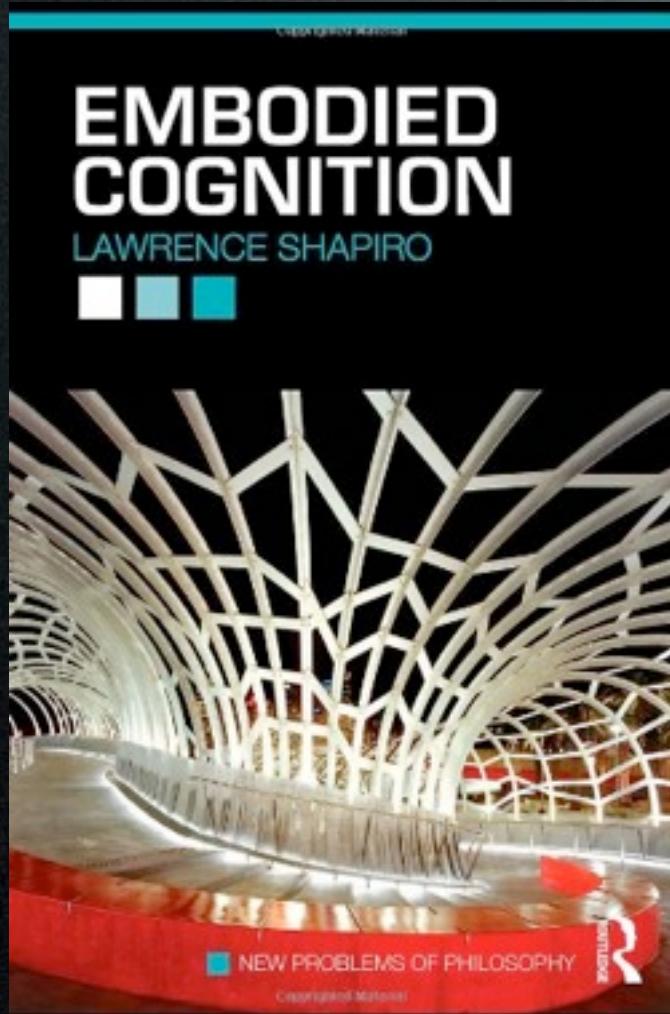
* Perseptuell læring



Embodied music cognition:

Vår musikkopplevelse/forståelse formes av erfaringer som kommer fra å ha en kropp som kan sanse og bevege seg ut i fra sine premisser.

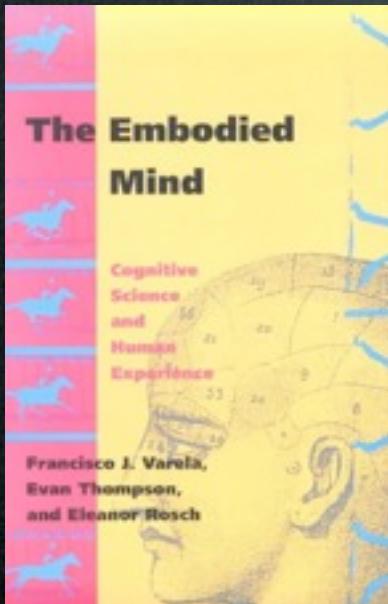
Lawrence Shapiro, 2011: Embodied Cognition: New Problems of Philosophy



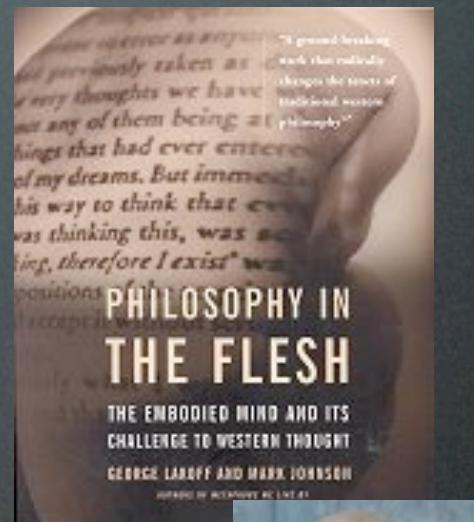
1. Hvordan er vår forståelse formet av kroppslike opplevelser?

1. Hvordan er vår forståelse formet av kroppslike opplevelser?

The Embodiment of Color



The Embodiment of Metaphor

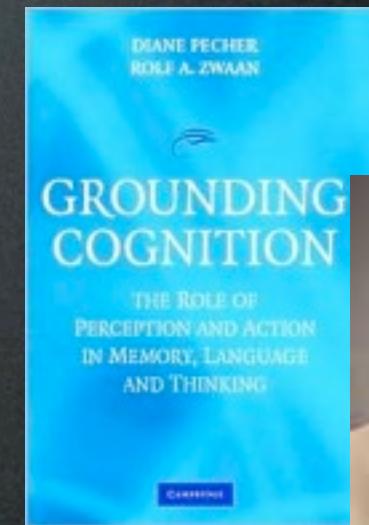


George Lakoff

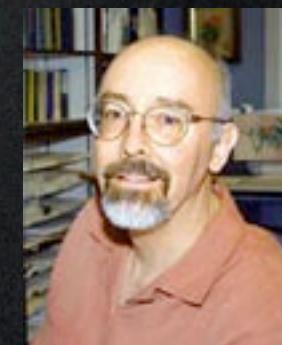


Mark Johnson

The Indexical Hypothesis



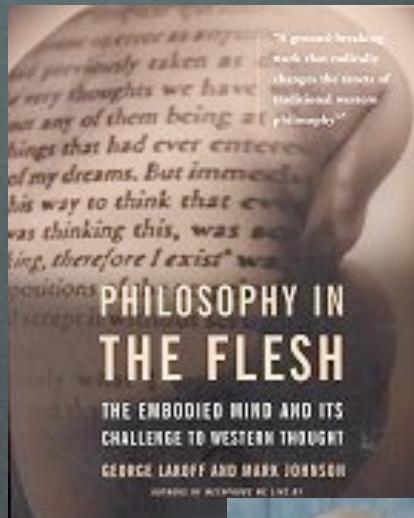
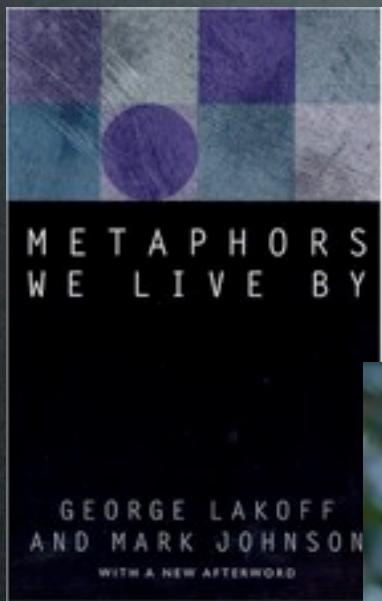
Arthur Glenberg



Lawrence Barsalou

The Embodiment of Metaphor

Musikalsk rytme



George Lakoff

Mark Johnson

Dynamikk

Kroppslig rytmisk
bevegelse

Bevegelsens tempo

Oppover
Nedover

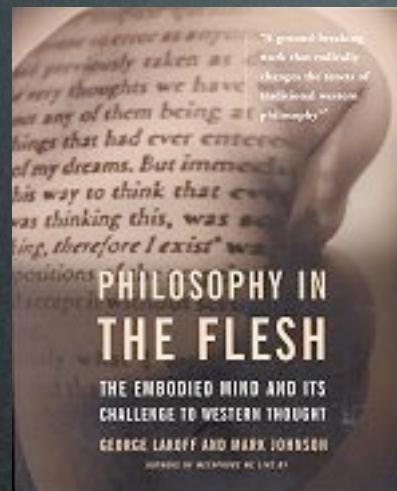
Intensitet

Oppover
Nedover

Tempo

Oppadgående
Nedadgående

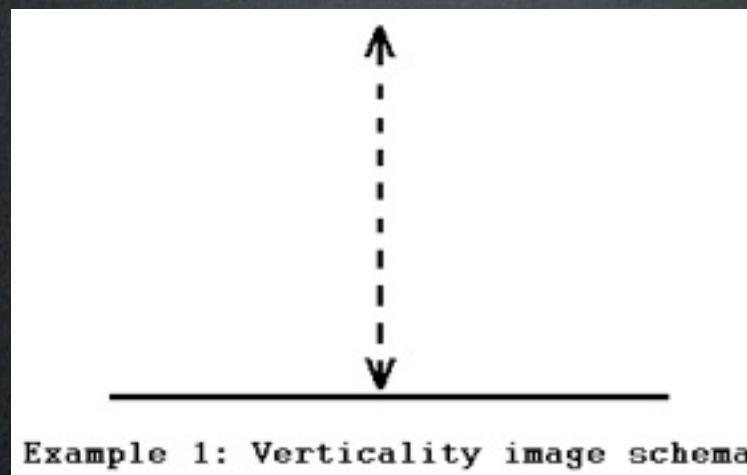
Vertikalitet



George Lakoff



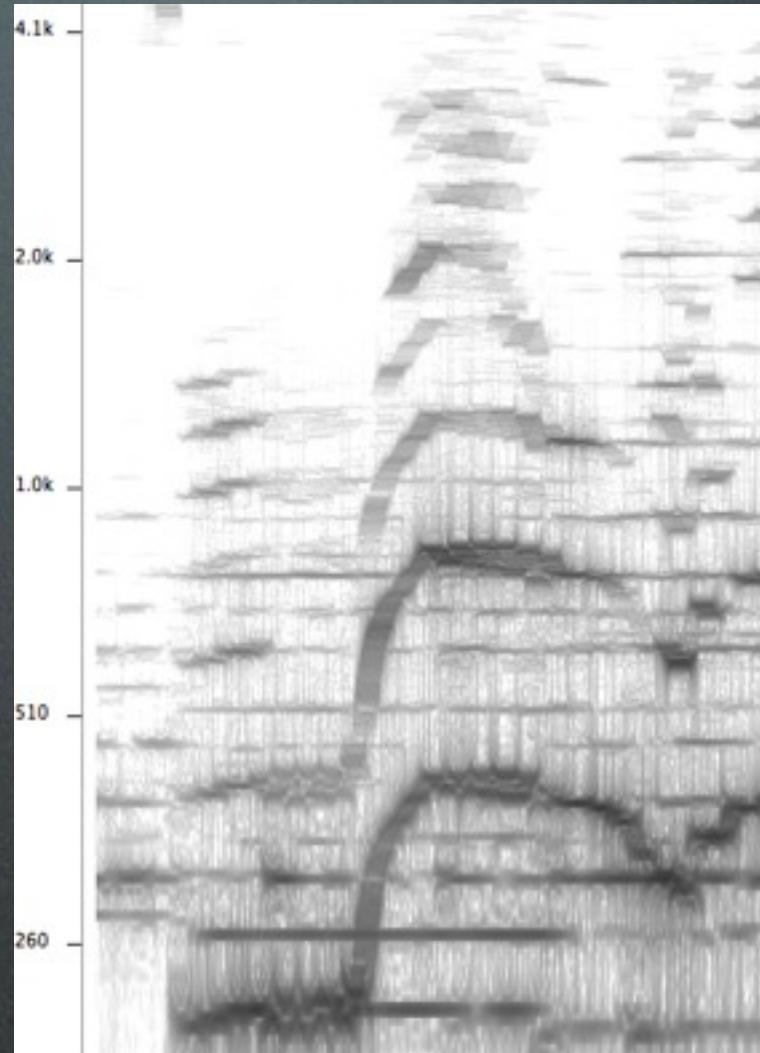
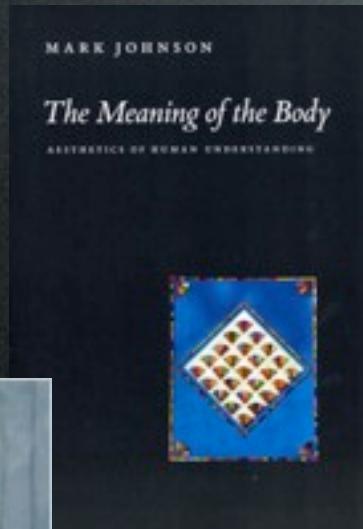
Mark Johnson



Example 1: Verticality image schema

“The slide from «some» (E-flat) up to «where» (the octave) creates a tension, the felt tension as we move from the lower pitch to the higher pitch and feel the strain and increased energy required to reach the higher note”

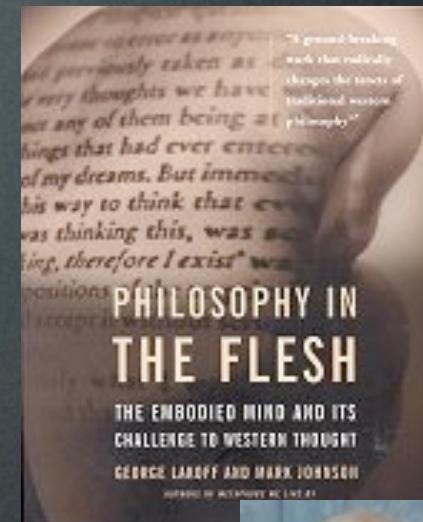
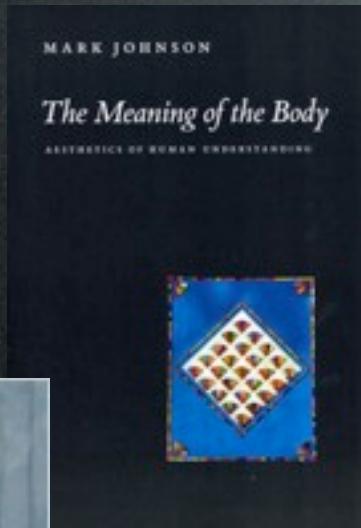
Mark Johnson (2007). *The meaning of the body: Aesthetics of human understanding*. Chicago and London: The University of Chicago Press. P. 240



Some-where o-ver the

Mark Johnson (2007). *The meaning of the body: Aesthetics of human understanding*. Chicago and London: The University of Chicago Press. P. 240

Den kroppslige metaforteoriens

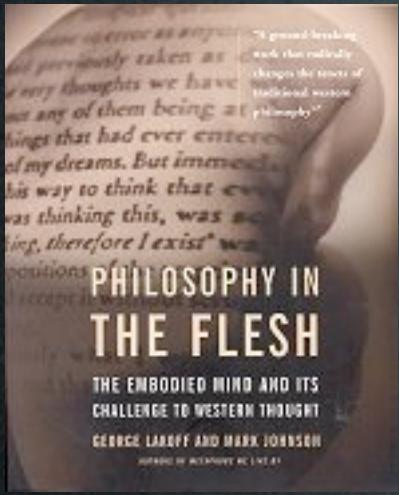


Mark Johnson

George Lakoff

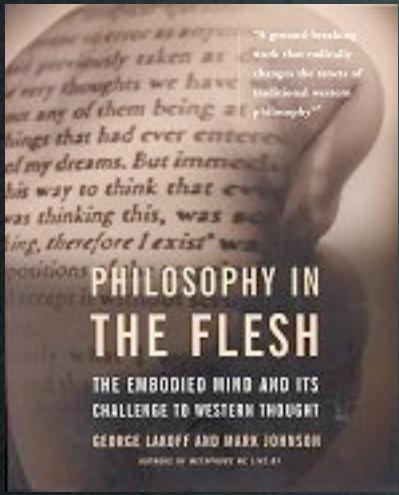
Verticality is not inherent in music (let alone in its notational representation); it is not *there* to be observed (heard) in the music, but it is instead a product of logical, metaphoric conceptualization.

Cox, Arnie, 1999 *The metaphoric logic of musical motion and space*. p. 50



We do not have a choice as to whether to acquire and use primary metaphor. Just by functioning normally in the world, we automatically and unconsciously acquire and use a vast number of such metaphors. Those metaphors are realized in our brains *physically* and are mostly beyond our control. They are a consequence of the nature of our brains, our bodies, and the world we inhabit.

George Lakoff & Mark Johnson, 1999, *Philosophy in the Flesh. The Embodied Mind and its Challenge to Western Thought*. P. 55.



For young children, subjective (nonsensorimotor) experiences and judgments, on the one hand, and sensorimotor experiences, on the other, are so regularly conflated – undifferentiated in experience – that for a time children do not distinguish between the two when they occur together.

George Lakoff & Mark Johnson, 1999, *Philosophy in the Flesh. The Embodied Mind and its Challenge to Western Thought*. P. 55.



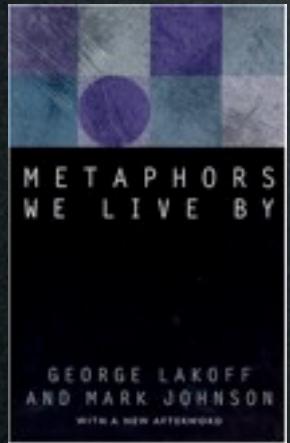
Kilde:

Nær/varm = en opplevelse av nærhet og kroppstemperatur.

Mål: Omsorg/hengivenhet

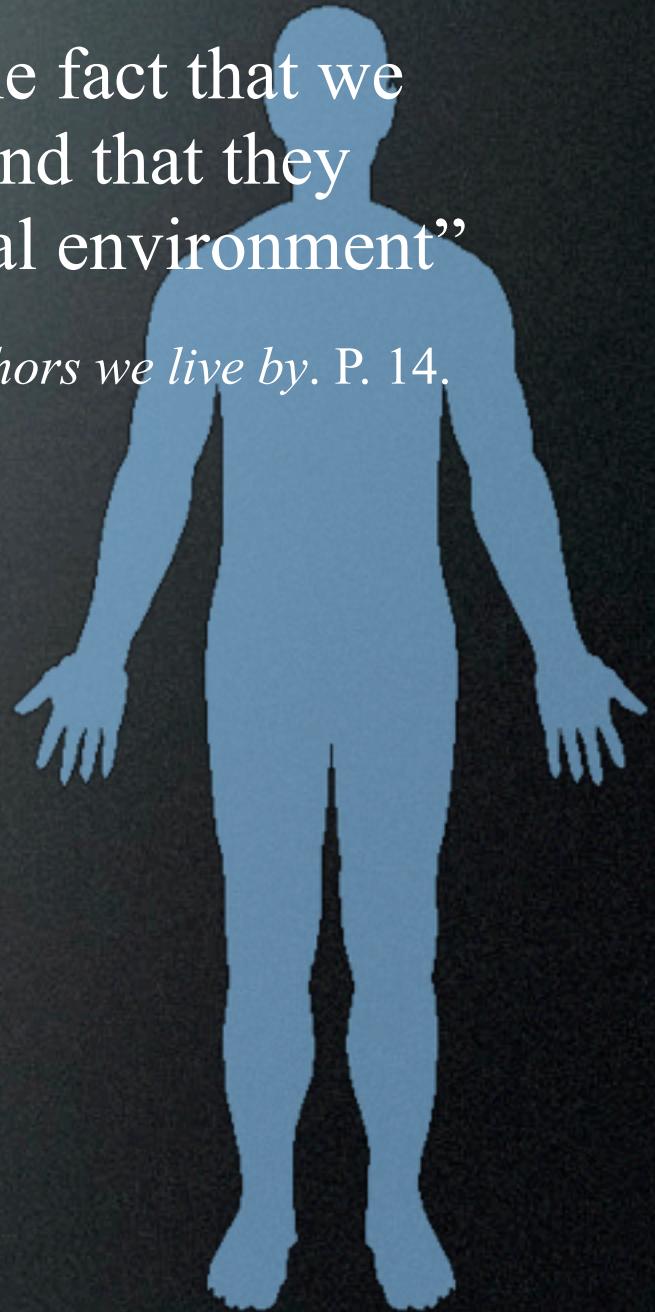
“Han er en nær person”

“Han er en varm person”

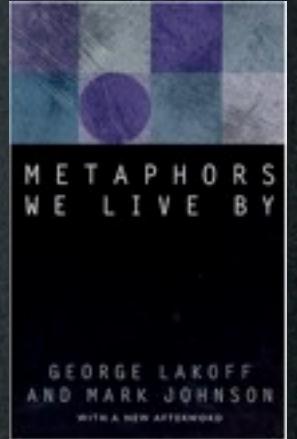


“spatial orientations arise from the fact that we have bodies of the sort we have and that they function as they do in our physical environment”

George Lakoff & Mark Johnson, 1980, *Metaphors we live by*. P. 14.



UP

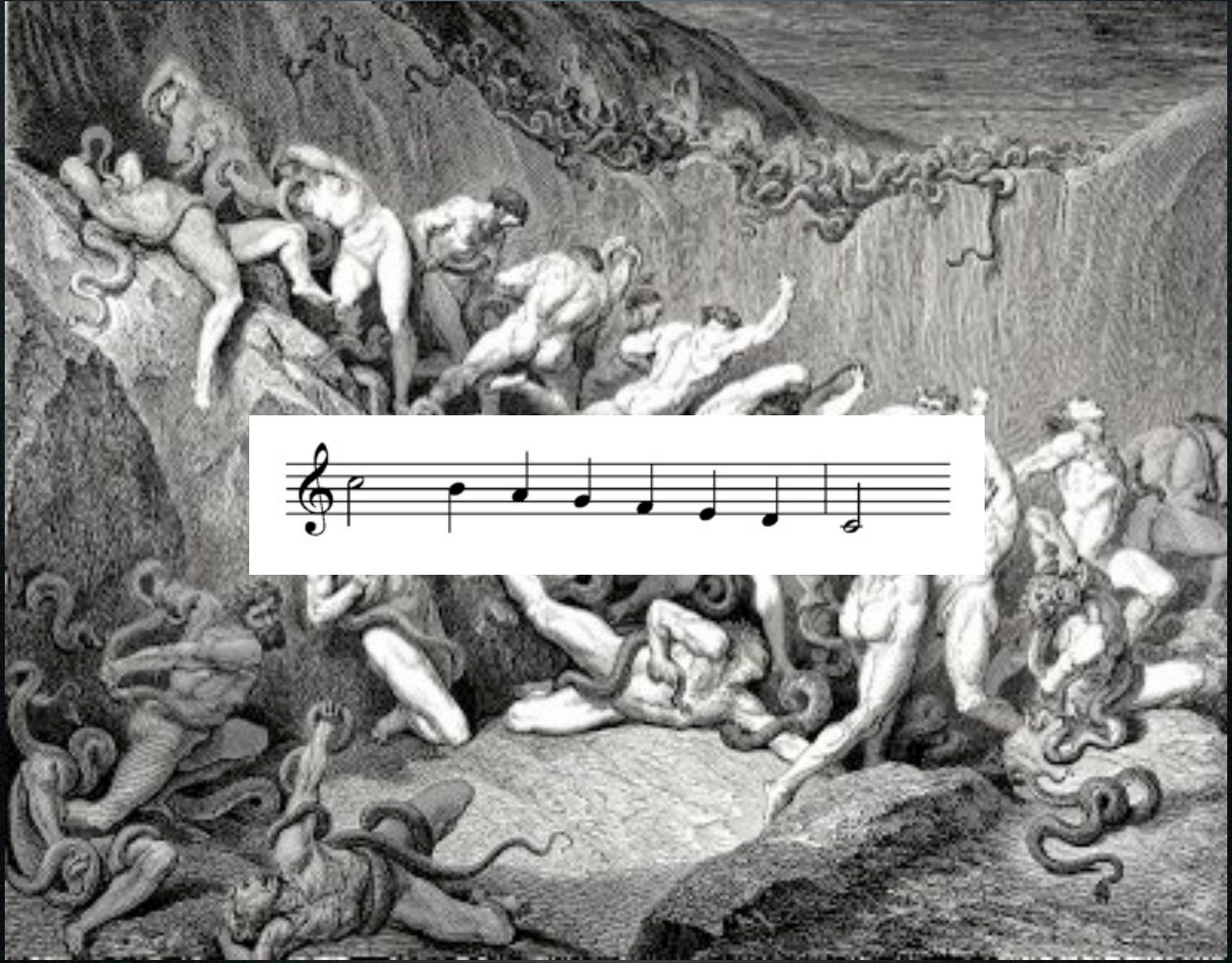


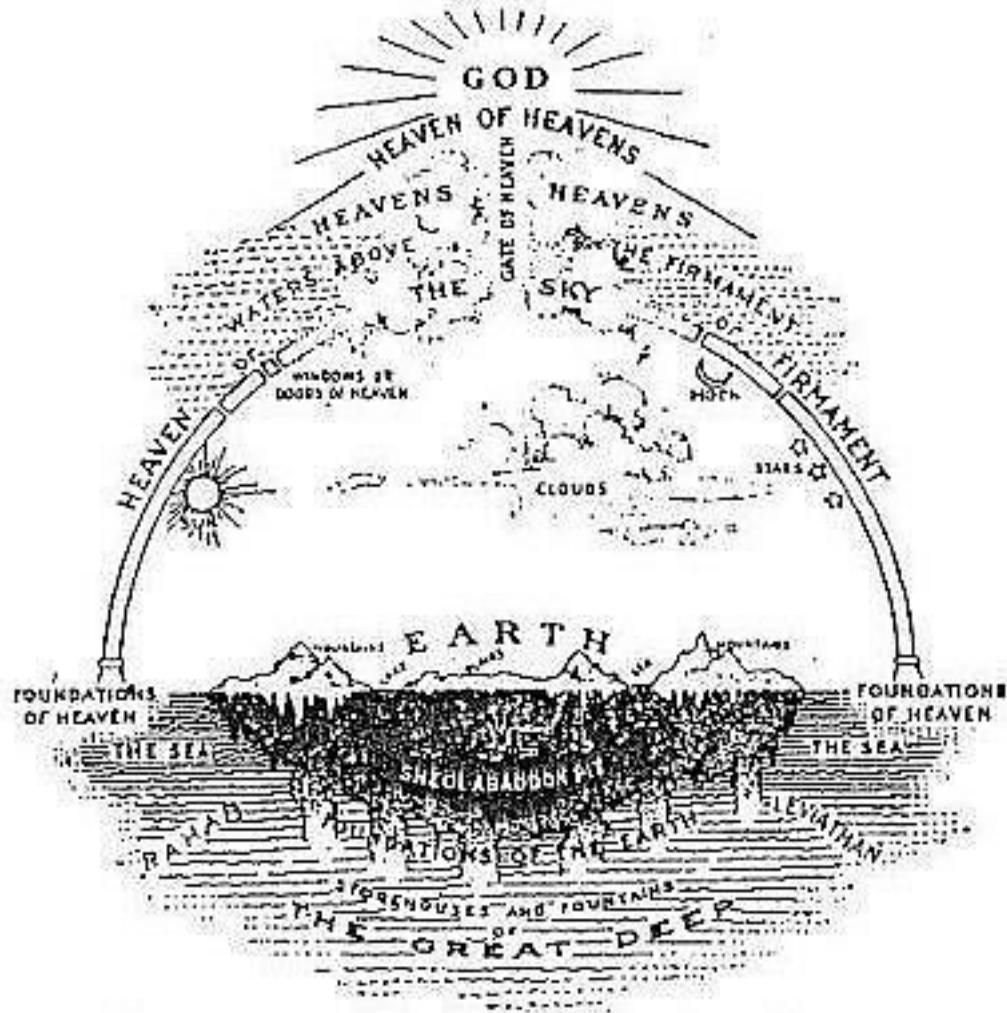
“He’s all right, I’m afraid, if he deader”

“He’s all right, I’m afraid, if he’s social hierarchy”

DOWN







THE ANCIENT HEBREW CONCEPTION
OF THE UNIVERSE



Literal vertical relations:

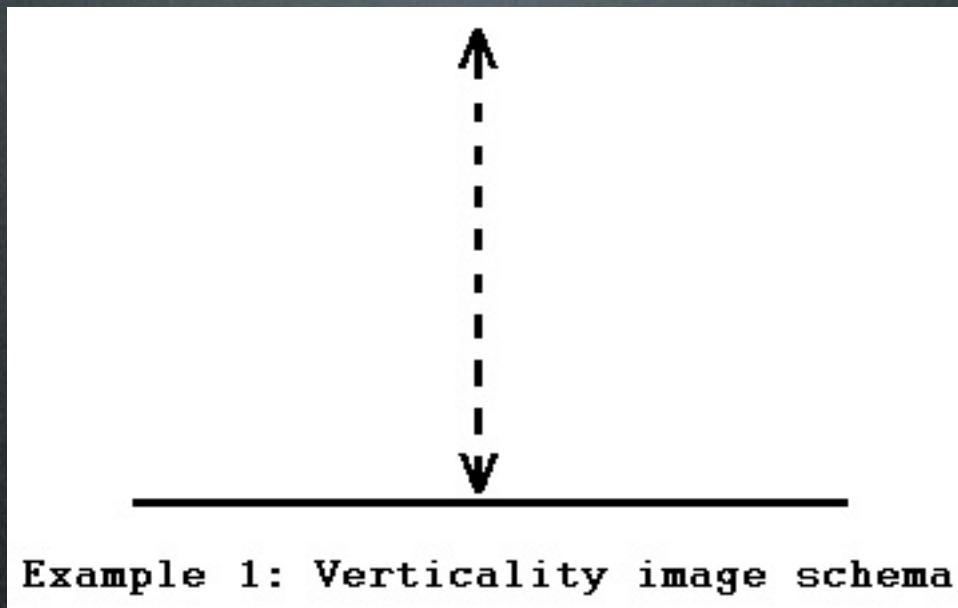
- 1) Staff notation
- 2) Vocal experience
- 3) The propagation of sound waves

Metaphoric verticality:

- 4) ‘Higher’ and ‘lower’ frequencies
- 5) ‘Higher’ and ‘lower’ perceived loudness levels of high and low notes
- 6) ‘Higher’ and ‘lower’ amounts of air used for high and low notes
- 7) ‘Higher’ and ‘lower’ magnitudes of effort needed for high and low notes
- 8) ‘Higher’ and ‘lower’ degrees of tension in producing high and low notes
- 9) The association of ‘high’ levels of emotional intensity and pitch at climaxes
- 10) The metaphoric state-locations of tones in pitch space

Cox, Arnie, 1999 *The metaphoric logic of musical motion and space.* p. 18f

PITCH RELATIONSHIPS ARE RELATIONSHIPS IN VERTICAL SPACE



Zbikowski, L. M. (1998) *Metaphor and music theory: reflections from cognitive science*. In Music Theory Online Volume 4.1

CONCEPTUALIZATION

The concepts on which an organism relies to understand its surrounding world depend on the kind of body that it has.

BEGREPSDANNELSE

De begreper vi bruker for å forstå den verden vi lever i avhenger av hva slags kropper vi har.

CONCEPTUALIZATION

The perceptual and cognitive mechanisms on which we as humans rely to understand music depend on the kind of body that we have.

MUSIKKFORSTÅELSE

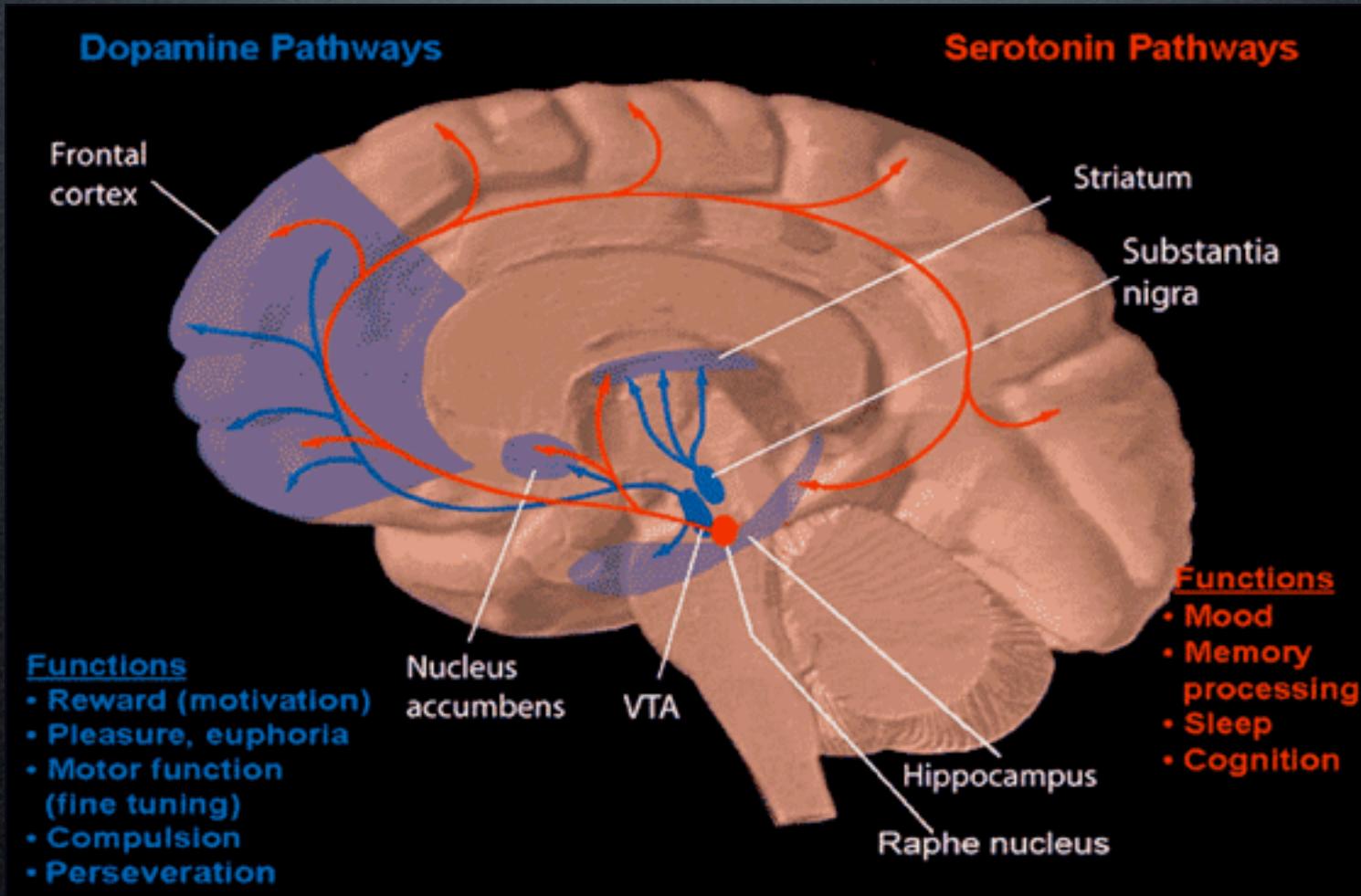
De perceptuelle og kognitive mekanismene vi bruker for å forstå musikk avhenger av hva slags kropper vi har.



What music feels like...

DIGITDOWN.COM

Dopamin





Lydverket, NRK 20/9-2012

M. Guhn, A. Hamm, M. Zentner, 2007, «Physiological and Musico-Acoustic Correlates of the Chill Response», Music Perception 24/5.

Correlates of Chills 473

PHYSIOLOGICAL AND MUSICO-ACOUSTIC CORRELATES OF THE CHILL RESPONSE

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LISTENING TO MUSIC OFTEN EVOKES affective states that are accompanied by distinctive subjective experiences and specific physiological changes. In this study, we examined the phenomenon of chills and its concomitant physiological reactions. In a preliminary study, experimenter-selected music excerpts were played to 27 participants, and musical passages especially apt to elicit chill experiences were identified on the basis of subjective ratings. In a subsequent study with 27 new participants, subjective chill experiences and physiological responses were recorded in real time. The highest numbers of chills were experienced during musical passages characterized by similar dynamic, harmonic, and structural characteristics, which coincided with distinct patterns of heart rate and skin conductance increases. For participants experiencing a chill during these passages, increases in skin conductance were significantly larger than for participants without chills. The heart rate response did not differ between groups.

Received October 26, 2005; accepted January 17, 2007.

Key words: music; emotion; chills; psycho-physiology; skin conductance/heart rate

FOR MILLENNIA, PEOPLE HAVE BEEN intrigued by the power of music to express and arouse emotions (Juslin & Sloboda, 2001; Krumhansl, 1997).

that is accompanied by goose bumps, shivers, or tingles in the spine. It is generally felt in the upper spine, neck, shoulders, and scalp and is occasionally accompanied by a lump in the throat, weeping, sighing, or a palpitation. Of the stimuli that have been reported to elicit chills (e.g., visual art, speech, beauty, physical contact), music is the most potent trigger (e.g., Goldstein, 1980; Panksepp, 1995).

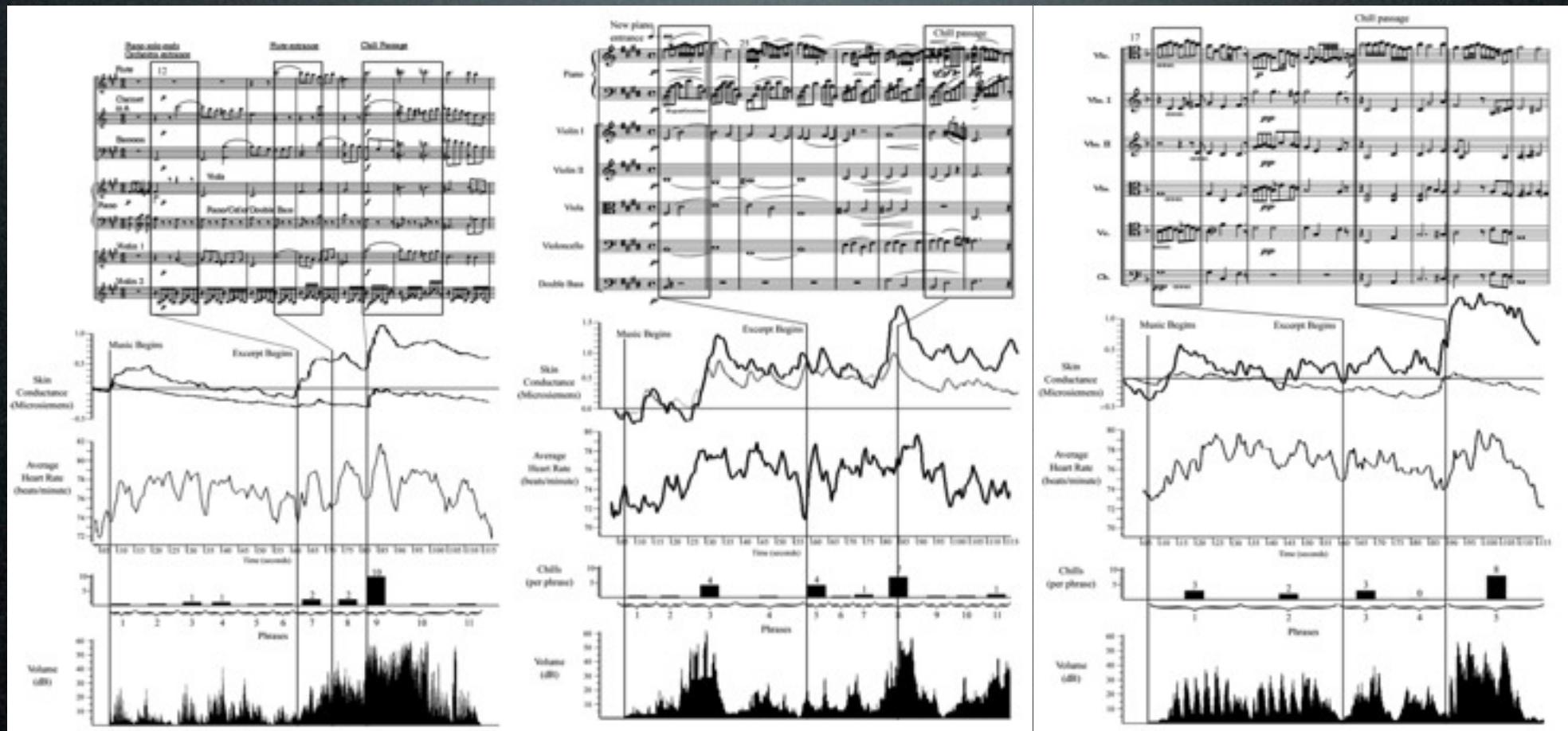
Despite a growing interest in the chill reaction, two issues remain unresolved: First, researchers are trying to pin down the physiological and neural mechanisms underlying the chill response. For example, Blood and Zatorre (2001) found that chills—in response to participant-selected music—coincided with increased blood flow in the nucleus accumbens, the left ventral striatum, the dorsomedial midbrain, the insula, thalamus, and the anterior cingulate, but also in the supplementary motor area and bilateral cerebellum. Increased blood flow was observed in the amygdala, left hippocampus, and the posterior cortex. Moreover, chills were also associated with increased heart rate (HR), respiration, and forearm muscle activity, but not with increased skin conductance, in comparison to a within-subject control condition, for which participants listened to music passages chosen by another participant. Rickard (2004), on the other hand, found that skin conductance significantly increased during participant-selected "emotionally powerful and meaningful music" as compared with experimenter-selected "arousing music." The participant-selected music also elicited the greatest number of chills—indicated via button presses. This finding was recently corroborated by a study by Craig (2005), in which both participant-selected and experimenter-selected pieces that induced chills led to increases in skin conductance, as well as to observable pile-erection on the forearm. Finally, findings from a study by Panksepp and Bekkedal (1997) suggest that chills tend to co-occur with alpha wave blocking.

Hudkonuktans



+ hjerterytme

27 respondenter



W. A. Mozart:
Pianokonsert nr. 23
(K488), andre sats, takt
1-20.

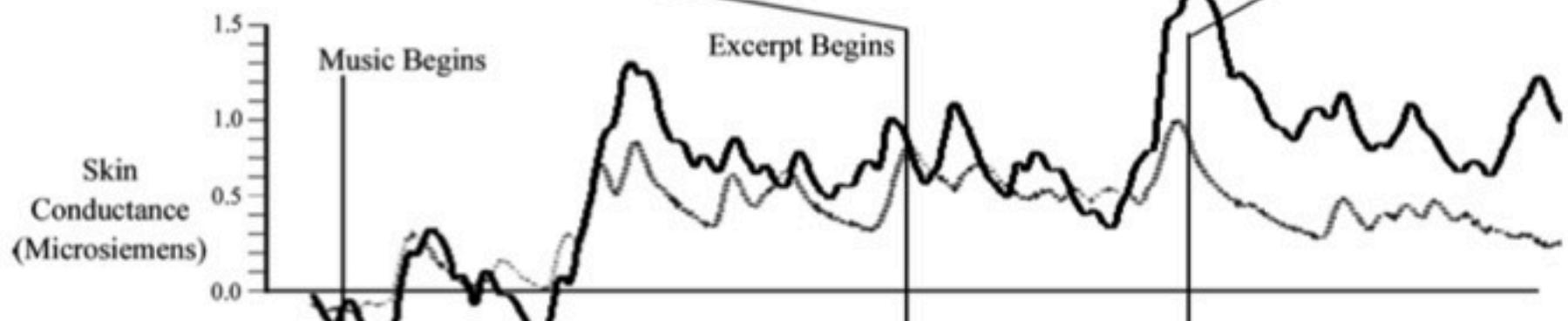
F. Chopin:
Pianokonsert nr. 1,
andre sats, takt 1-31.

M. Bruch:
Kol Nidrei (op. 49),
andre sats, takt 1-25.

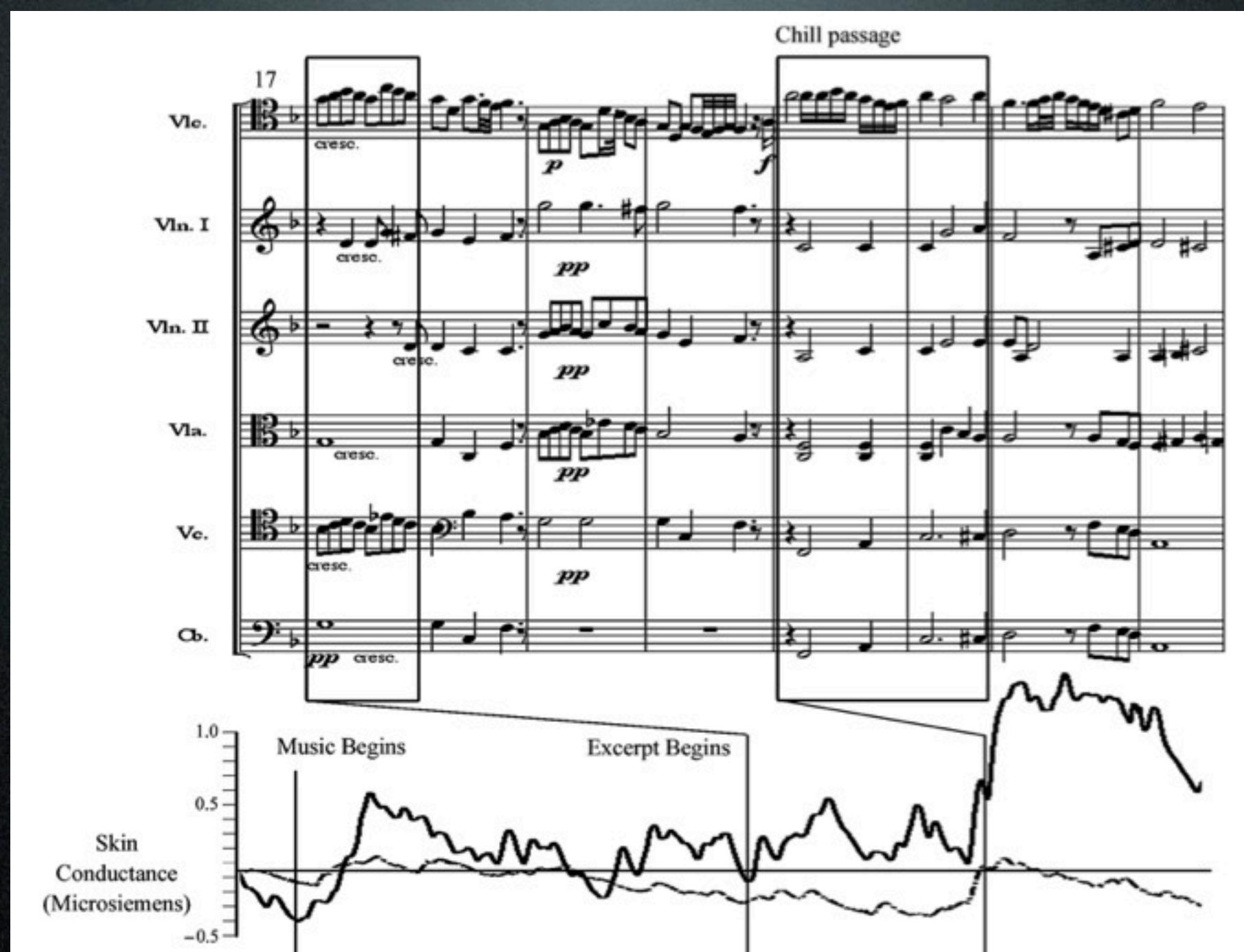
New piano entrance *p* *so* 25 *cresc.*
legatissimo

Piano
 Violin I
 Violin II
 Viola
 Violoncello
 Double Bass

Chill passage



F. Chopin: Pianokonsert nr. 1, andre sats, takt 1-31.



M. Bruch: Kol Nidrei (op. 49), andre sats, takt 1-25.

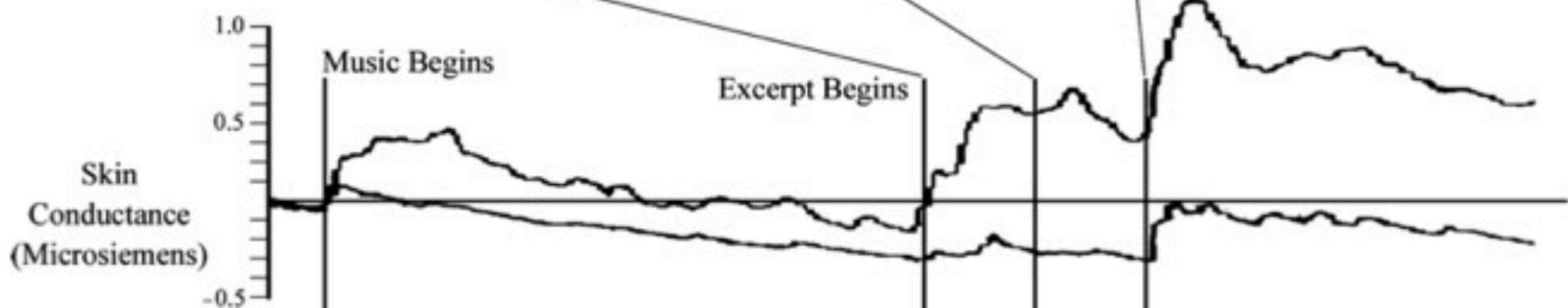
Piano solo ends
Orchestra entrance

Flute entrance

Chill Passage

12

Flute
Clarinet in A
Bassoon
Viola
Piano p
Piano/Cello/Double Bass
Violin 1
Violin 2



W. A. Mozart: Pianokonsert nr. 23 (K488), andre sats, takt 1-20.

MUSICAL ANALYSIS

Our final question was whether the chill passages possess unique musical and/or acoustic characteristics. The chill passages showed striking similarities: First, all three music excerpts were from slow movements (i.e., Adagio or Larghetto). Second, they were characterized by the alternation, or contrast, of the solo instrument (e.g., piano) and the orchestra (e.g., strings and wood-winds), and—third—by a sudden or gradual volume increase from piano (i.e., soft) to forte (i.e., loud). During the Mozart chill passage, after a piano solo and a combined piano-orchestra section, all the orchestral instruments suddenly and simultaneously come in at a forte volume level (measure 16). Likewise, during the Chopin chill passage, after alternating piano and orchestra sections, the orchestra and piano, together, reach a forte level (measure 29). During the Bruch chill passage, after a soft orchestral introduction and alternating cello and orchestra parts, the loud cello-entrance is immediately followed by a loud orchestral chord (measure 21), continuing with the cello and the orchestra playing in combination.

Fourth, all chill passages are characterized by an expansion in its frequency range in the high or low register. During the Mozart chill passage, the violins play the melodic line one octave higher than in the preceding phrase; during the Chopin chill passage, the double bass section adds a lower octave; and during the Bruch chill passage, the solo cello part leaps up an octave.

Fifth, all chill passages were characterized by harmonically peculiar progressions that potentially elicited a certain ambiguity in the listener; that is, in all three chill passages, the music went through a harmonic progression that briefly deviated from a pattern that could have been expected based on the previous section. In the Mozart piece, this harmonic peculiarity is characterized by chromaticism, a deceptive cadence (Neapolitan; measure 18), and the use of tonicization preceding the return to the original tonic. In addition, the orchestral instruments that previously played overlapping lines now play their lines concurrently. In the Chopin piece, the peculiarity is represented by a modulation as well as a sequence of harmonic progressions with a number of chord inversions (i.e., leading notes in the bass part; measures 27-28), and finally the use of an augmented V⁷ chord (measure 29); elements that tend to create an expectation for harmonic resolution. In the Bruch piece, the peculiarity arises, in part, due to the constant back and forth between the tonic (D minor) and its mediant (F major), which lends a certain ambiguity regarding the tonality of the piece. Then, during the chill passage, this ambiguity is emphasized by directly juxtaposing the A (i.e., the root of the dominant) and the

mediant (F major) when the cello and orchestra play their sudden, successive entrances; thereafter, the music, via a cadence, returns to the tonic (D minor). In all cases, these harmonic peculiarities potentially create the type of ambiguity, anticipation, or tension in the listener that previous studies described (Sloboda, 1991; also see Cuddy & Lyons, 1981; Krumhansl, 2000).

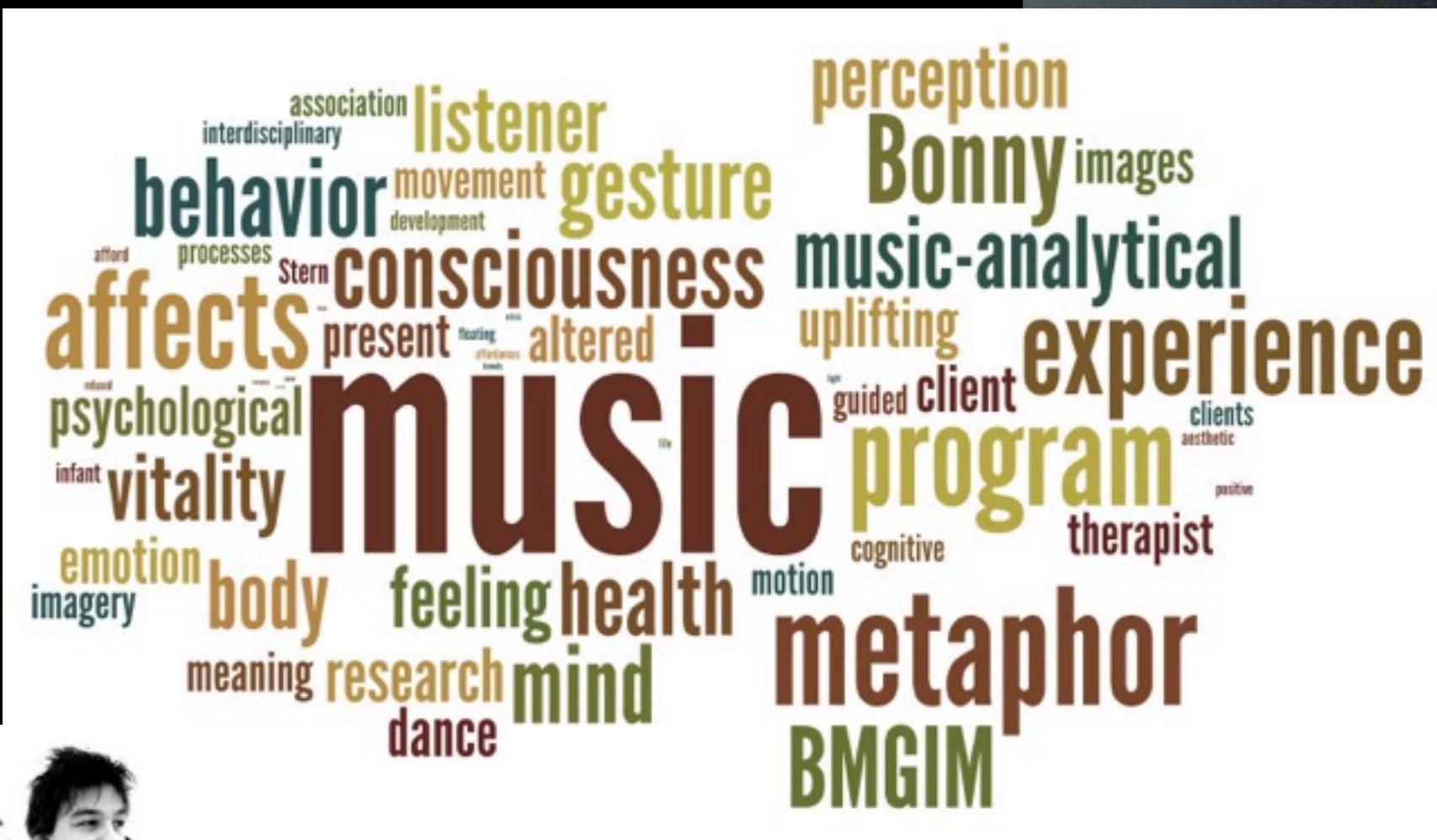
Finally, the chill passages are similar in that they are characterized by a specific interplay of the melodic and harmonic progression. In the Mozart piece, the same melodic line that appears in the violins and clarinets, in the phrase preceding the chill passage, is repeated during the chill passage, an octave higher in the violins. Now, the same melodic line, due to the chromatic, harmonically different accompaniment, creates a different listening experience, as the main melodic notes (A and E sharp, measure 17) are suspension notes, whereas they were harmonic notes before. In the Chopin piece, the melodic line in the piano part is characterized by chromatic elements, particularly right at the beginning of the chill passage. Importantly, the melody has a pivotal harmonic function, as the melodic semi-tone step from F sharp to F double sharp creates an augmented V⁷ of V chord, and consequently the G sharp, part of an E major chord, becomes a suspension note of the subsequent V⁷ chord. In the Bruch piece, the melody of the cello's first (repeated) musical phrase starts on D, followed by a D minor chord in the orchestra. The second musical phrase starts on G, accompanied by a G minor chord in the orchestra. The third musical phrase—the beginning of the chill passage—starts with an A, and this note is followed by an F (!) major chord. Thus, the large melodic line—D-G-A or i-v-V—is, at first, accompanied by the according chords in the orchestra, whereas this pattern suddenly deviates during the chill passage. All in all, it is thus likely that—during each chill passage—not the melodic line or harmonic progression or change in volume or register by itself, but the combination of melodic, harmonic, dynamic, structural, and acoustic elements create a sense of deviation from the previous pattern; and thus elicited the strongest responses in the emotional and psycho-physiological domains, which confirms the notion that these passages are, in comparison to the preceding musical progressions, special.

Discussion

To our knowledge, the current research is the most comprehensive study that continuously investigated physiological responses to experimenter-selected music while simultaneously relating them to the subjective experience of chills, and, most distinctively, to

Music, Motion, and Emotion

Theoretical and Psychological Implications of Musical Embodiment



Masterstudent Stian Omdal - masterstipend

METODE:

24 respondenter

12 menn - 12 kvinner

Alder, gj.snitt = 25.5 år (fra 20 til 40)

Standardavvik (S.D.) = 5.54

10 rekrutert fra Inst. for musikkvitenskap

14 fra andre steder

12 med mer enn fem års musikalsk trening

12 med mindre enn fem års musikalsk trening

METODE:

Kombinasjon av

Egenvalgt musikk
og
forhåndsvalet musikk

Egenrapport
og
Hudkonduktansmåling

METODE:

Forhåndsvalet musikk:

1. Christel Alsos: *Finding Gold* (2010) (0:00–1.30)
2. Gustav Mahler: *Adagietto* (*Symfoni nr. 5 i Ciss-moll, IV*, innspilling av New Philharmonia Orchestra, 0:00–1:25)
3. Coldplay: *Fix You* (2005) (1:38–3:55)
4. Sigur Rós: *Varúð* (2012) (1:55–5:33)
5. Josh Groban: *You Raise Me Up* (2003) (2:30–3:45)

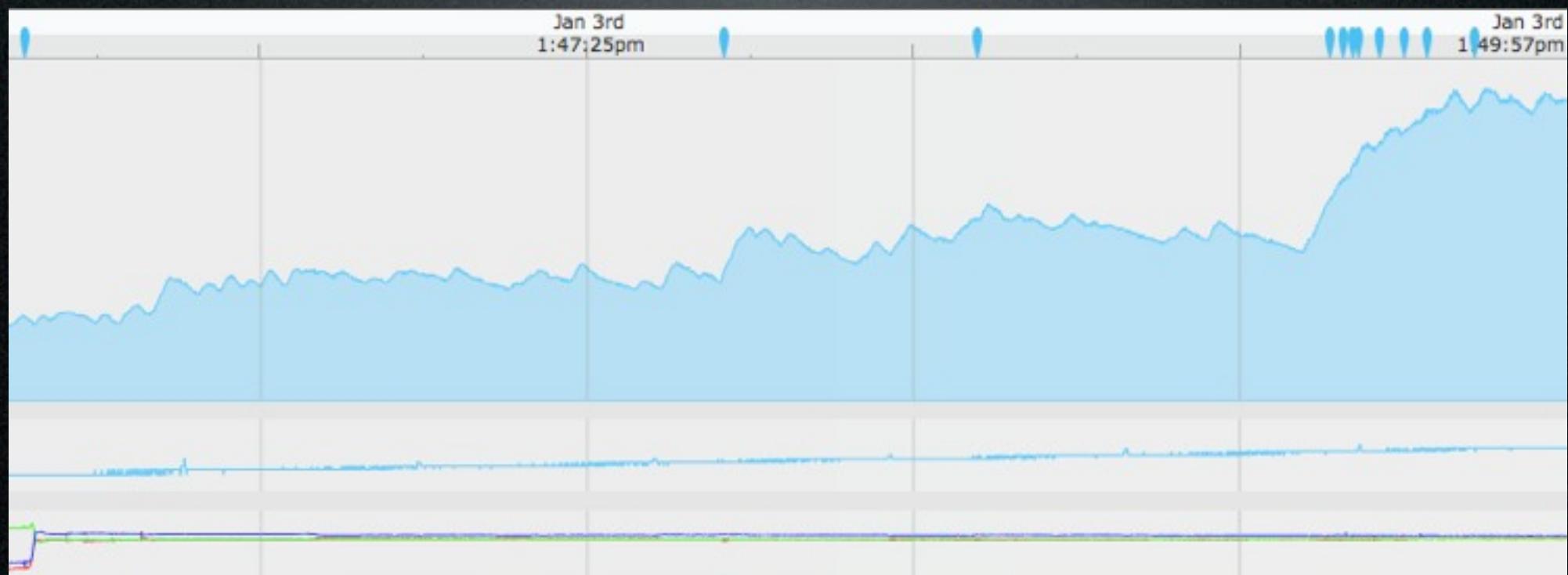
METODE:

Kombinasjon av

Egenvalgt musikk
og
forhåndsvalet musikk

Egenrapport
og
Hudkonduktansmåling

METODE:



RESULTATER (egenvalgt musikk):

| Genre: | Group/artist/comp.: | Title: | M.E. | S/MT |
|-------------------------|----------------------|---|------|------|
| Rock: | U2 | Where the Streets Have No Name (live) | 8 | M/-5 |
| | Nickelback | Lullaby | 9 | F/-5 |
| | Dream Theater | The Count of Tuscany | 4 | M/-5 |
| | Guns'n'Roses | Sweet Child of Mine | 2 | M/+5 |
| Singer-songwriter: | First Aid Kit | Lion's Roar | 1 | F/+5 |
| | Salem Al Fakir | Astronaut | 2 | M/-5 |
| | Melissa Horn | Kungsholmens Hamn | 11 | F/+5 |
| Pop: | DJ Sammy, Yanou & Do | Heaven – Yanou's Candlelight Mix | 9 | F/-5 |
| | Celine Dion | My Heart Will Go On | 10 | M/-5 |
| | Michael Jackson | Speechless | 2 | F/-5 |
| Electronic Dance Music: | Moby | Lift Me Up (2006 Remaster) | 10 | F/-5 |
| | Ocean Lab | Sirens of the Sea (Above and Beyond Club Remix) | 0 | M/-5 |
| Choir music: | Grex Vocalis | E. Grieg: Hvad est du dog skjøn | 10 | F/+5 |
| | Oslo Kammerkor | Ned i vester i soli glader | 3 | F/+5 |
| Indie pop: | Coldplay | Yes | 1 | F/+5 |
| | Kashmir | The Aftermath | 7 | M/+5 |
| Classical: | J. Sibelius | Symphony nr. 7 (from beginning) | 11 | M/+5 |
| | F. Chopin | Nocturne nr. 2, op. 29, andante | 3 | M/-5 |
| Electronica: | Björk | Hidden Place | 5 | M/+5 |
| Film Score: | Hans Zimmer | Time ("Inception") | 3 | M/-5 |
| Rap: | Timbuktu | Plotten Tjoknar | 8 | F/+5 |
| Jazz: | Clockwork | Valseri | 7 | F/+5 |
| Reggae: | Kultiration | Harmoni | 4 | M/+5 |
| Afghan pop: | Moein | Bahaneh | 16 | F/-5 |

M.E. = Marker Entries = markører (trykk)

S = Sex = Kjønn (Kvinner totalt=87, Menn totalt=59)

+5 = mer enn fem års musikalsk trening (totalt=70)

-5 = mindre enn fem års musikalsk trening (totalt=76)

RESULTATER (egenvalgt musikk):



Alle stedene med markører ble studert og korrespondanse i økning i hudkonduktansmålingen ble gradert fra 1 til 3 ut fra økning i microsiemens i relasjon til det foregående og den omkringliggende målingsresultat.

0 = null økning

3 = en kraftig økning

RESULTS (self-selected music):

| Musical feature | M.E. | Resp. | M.S.C. |
|--|-------------|--------------|---------------|
| Ascending melodic lines or pitch movements | 48 | 15 | 1.9 |
| High pitches | 39 | 14 | 1.6 |
| Crescendos | 31 | 9 | 1.7 |
| Rhythmic groove | 15 | 5 | 0.8 |
| Entrance of new element | 14 | 8 | 1.4 |
| Increased rhythmic density | 13 | 7 | 1.3 |
| Musical theme | 10 | 7 | 1.4 |
| Expressive vocal | 10 | 5 | 1.2 |
| Sudden rhythmic break | 9 | 5 | 1.0 |
| Return to earlier element | 5 | 3 | 2.2 |
| Decrescendos | 4 | 2 | 2.0 |
| Descending melodic lines | 3 | 1 | 1.6 |
| Rhythmic displacement | 2 | 2 | 1.0 |

M.E. = Marker Entries = Markører (Totalt:146)

Resp. = Antall respondenter

M.S.C. = Gjennomsnittstall for økning i hudkonduktansmåling



Respondent: Mann, 21 år, mindre enn fem års musikalsk trening, ikke musikkstudent.

S: Celine Dion: «My Heart Will Go On» (1997)



LEONARDO DiCAPRIO

KATE WINSLET

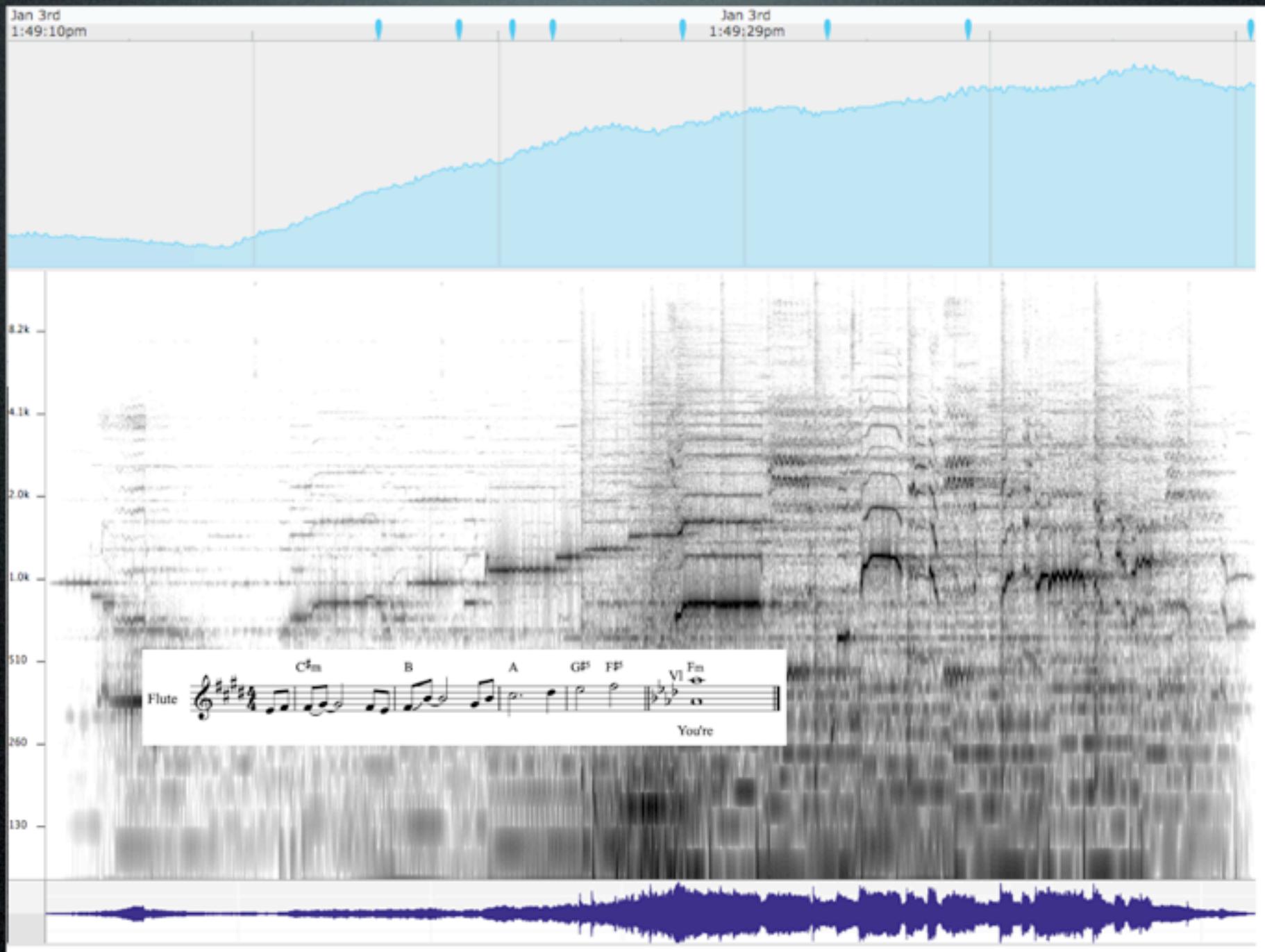


TITANIC

FROM THE DIRECTOR OF 'ALIENS,' 'T2' AND 'TRUE LIES'

James Cameron
Produced by **James Cameron**
Written by **James Cameron**
Music by **James Horner**
Cinematography by **Elmo Williams**
Edited by **James W. Skavens**
Production Design by **David生产和设计**
Costume Design by **Colleen Atwood**
Visual Effects by **Industrial Light & Magic**
Sound by **John J. Rydman**
Visual Effects Supervisor by **John Knoll**
Production Design by **David生产和设计**
Costume Design by **Colleen Atwood**
Visual Effects by **Industrial Light & Magic**
Sound by **John J. Rydman**
Visual Effects Supervisor by **John Knoll**

Respondent: Mann, 21



Celine Dion: «My Heart Will Go On» (1997)

RESULTATER (forhåndsbestemt musikk):

21 (av 24) (87.5%) trykket på sensorknappen i løpet av lyttingen.

17 (of 24) (71 %) trykket mer enn en gang.



RESULTATER (forhåndsbestemt musikk):

| Artist/composer: piece (place/passage) | M.E. | M.S.C. | S.C.inc. | M.S.C. | Corr. |
|--|-------------|---------------|-----------------|---------------|--------------|
| 1. Christel Alsos: <i>Finding Gold</i> (0:22–0:27) | 8 | 0.8 | 11 (T:22) | 1.5 | 6 |
| 2. Christel Alsos: <i>Finding Gold</i> (0:46–0:52) | 9 | 1.3 | 12 (T:22) | 1.5 | 6 |
| 3. Christel Alsos: <i>Finding Gold</i> (1:18–1:25) | 6 | 1.7 | 8 (T:22) | 2.1 | 5 |
| 4. Gustav Mahler: <i>Adagietto</i> (0:34–0:40) | 7 | 1.0 | 9 (T:21) | 1.4 | 6 |
| 5. Coldplay: <i>Fix You</i> (2:35–2:37) | 9 | 1.2 | 9 (T:21) | 2.2 | 5 |
| 6. Coldplay: <i>Fix You</i> (3:02–3:06) | 6 | 2.2 | 6 (T:21) | 2.1 | 6 |
| 7. Sigur Rós: <i>Varúð</i> (2:58–3:03) | 14 | 1.1 | 8 (T:21) | 2.1 | 7 |
| 8. Josh Groban: <i>You Raise Me Up</i> (3:16–3:20) | 5 | 1.4 | 10 (T:19) | 1.9 | 3 |

M.E. = Antall markører (fra individuelle respondenter)

M.S.C. = Gjennomsnittstall for økning av hudkonduktansnivå ved markører.

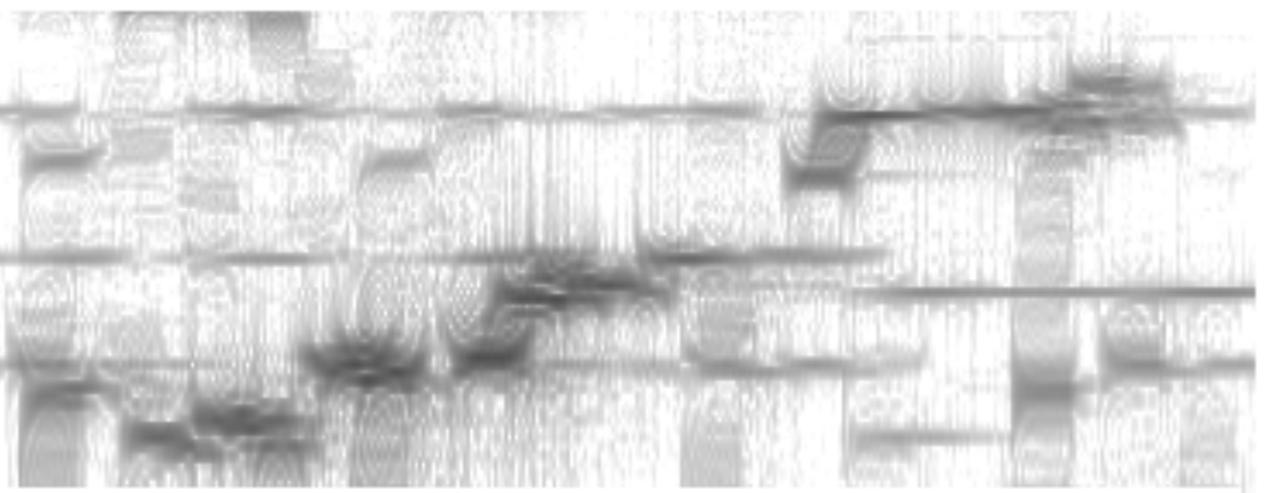
S.C.inc. = Antall økninger i hudkonduktans ved de ulike musikalske passasjene.

M.S.C. = Gjennomsnittstall for økning av hudkonduktansnivå ved alle aktuelle økninger.

Corr. = Antall sammenfall mellom markører og økning i hudkonduktansnivå

1. & 2.

| | | | | | |
|--|---|-----|-----------|-----|---|
| 1. Christel Alsos: <i>Finding Gold</i> (0:22–0:27) | 8 | 0.8 | 11 (T:22) | 1.5 | 6 |
| 2. Christel Alsos: <i>Finding Gold</i> (0:46–0:52) | 9 | 1.3 | 12 (T:22) | 1.5 | 6 |



Christel Alsos:
Finding Gold

Musical score for the first part of 'Finding Gold'. The key signature is F major (one sharp). The melody starts on F and moves to Am. The lyrics are: 'of what we see as true'.

Musical score for the second part of 'Finding Gold'. The key signature changes to A major (no sharps or flats). The melody continues from the previous section. The lyrics are: 'in this great pur - suit'.

Musikalske virkemidler:
Oppadgående melodisk linje og tonebevegelse,
høye toner og ekspressiv vokal.



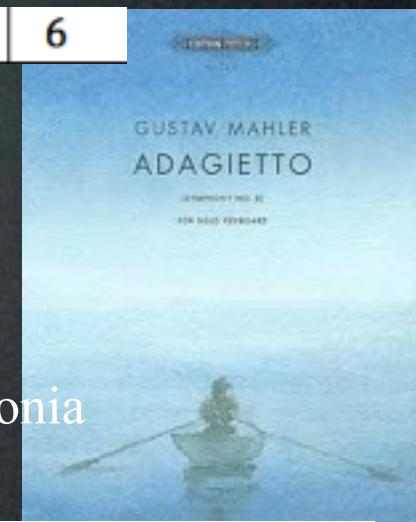
Christel Alsos: *Finding Gold*

Detailed description: This image shows the musical score for the first section of the song. It consists of five measures of music in 4/4 time, starting with a Dm chord. The lyrics are: "Am I get - ting close", "Do I drift a - way", and "Give me a sign". The melody is composed of eighth and sixteenth notes, primarily on the B string. Chords shown are Dm, Am, B♭, G, and G⁷.

Dm Am B♭ G G⁷

Am I get - ting close Do I drift a - way Give me a sign

Musikalske virkemidler:
Oppadgående melodisk linje, høye toner,
dynamisk økning (cresc.), økning i rytmisk
tetthet, dynamisk brudd og ekspressiv vokal.



Gustav Mahler:

Adagietto (Symfoni nr. 5 i Ciss-moll, IV, innspilt av New Philharmonia Orchestra)

A musical score for a single instrument. It features a treble clef staff, a key signature of one flat, and a time signature of 4/4. The music consists of two measures. The first measure contains three eighth notes. The second measure contains two eighth notes followed by a fermata over a dotted eighth note.

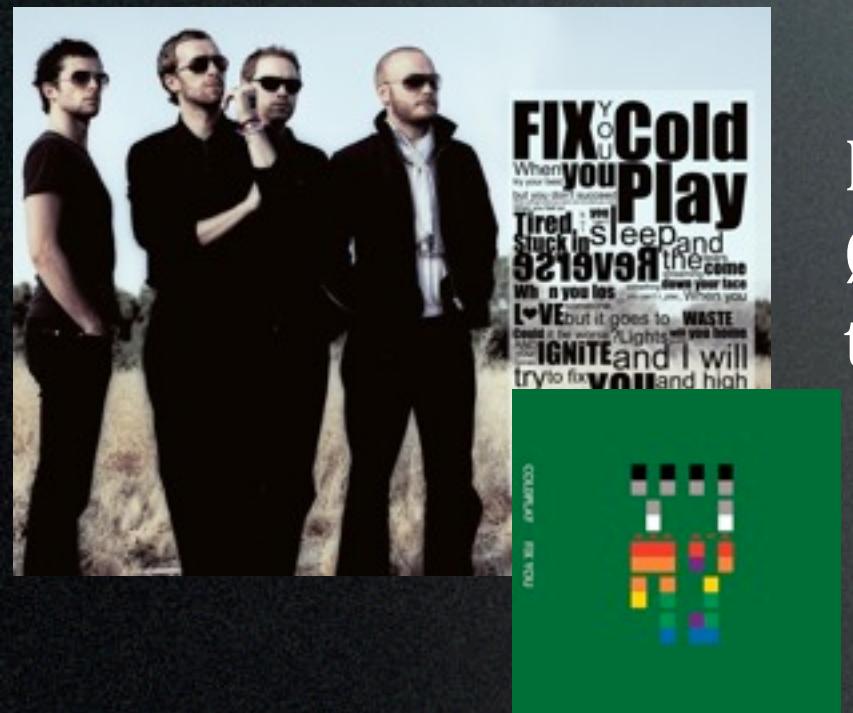


Musikalske virkemidler:
Oppadgående melodisk linje, høye toner og
ekspressive harmonier.

5. & 6.

| | | | | | |
|---|---|-----|----------|-----|---|
| 5. Coldplay: <i>Fix You</i> (2:35-2:37) | 9 | 1.2 | 9 (T:21) | 2.2 | 5 |
| 6. Coldplay: <i>Fix You</i> (3:02-3:06) | 6 | 2.2 | 6 (T:21) | 2.1 | 6 |

Coldplay: *Fix You*



Musikalske virkemidler:
Økning i rytmisk tetthet, oppadgående
tonebevegelse og nytt element.

7.

7. Sigur Rós: *Varúð* (2:58–3:03)

14

1.1

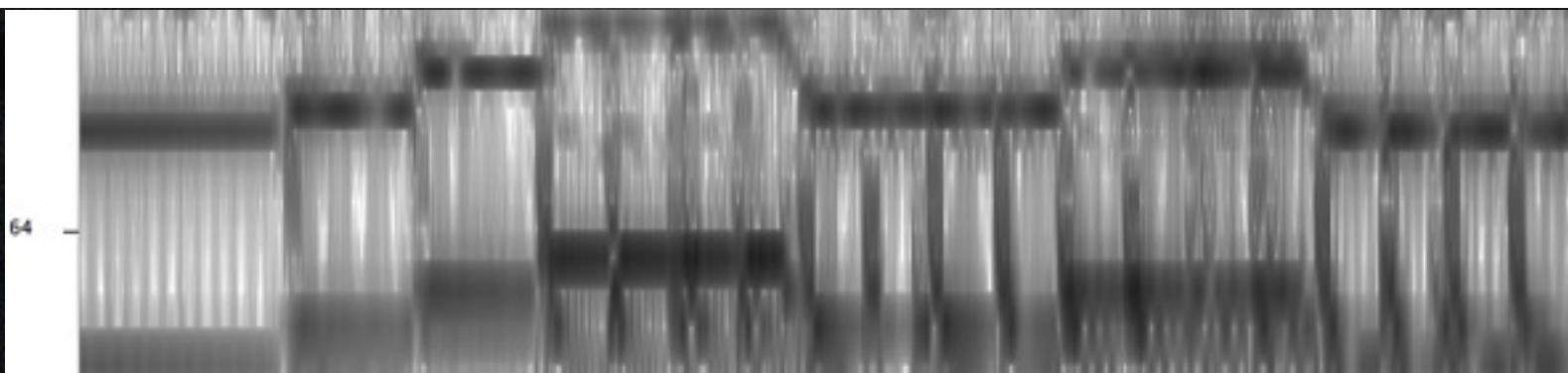
8 (T:21)

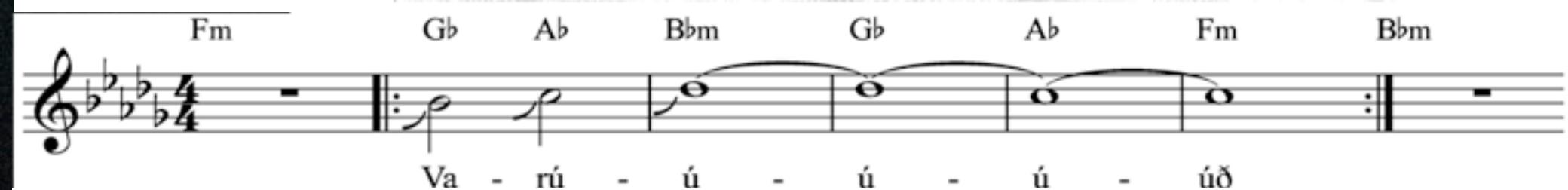
2.1

7



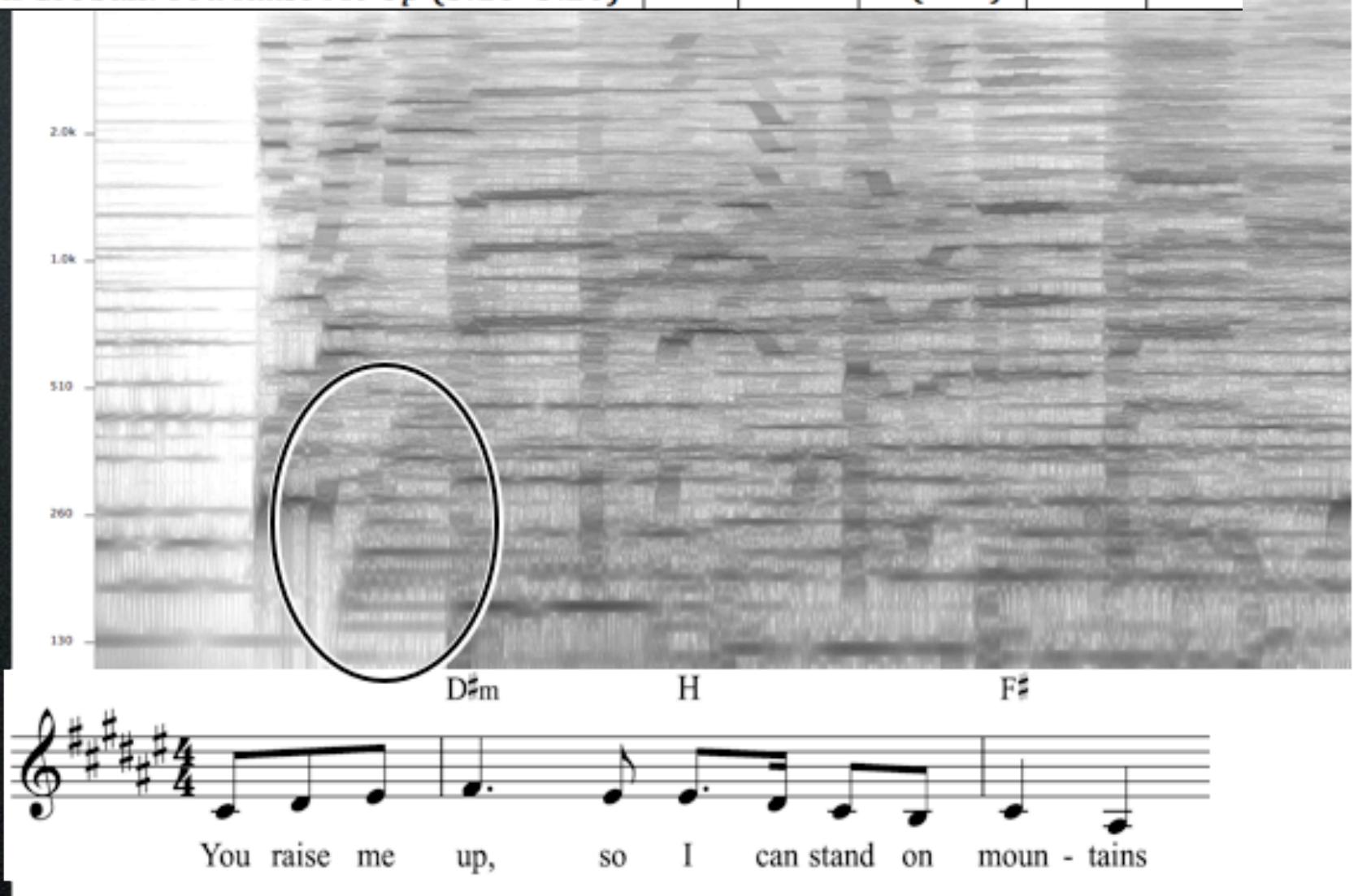
A musical score for the song "Varúð". It features a single staff with a treble clef, a key signature of five flats, and a time signature of 4/4. The notes are labeled with their corresponding chords: Fm, G♭, A♭, B♭m, G♭, A♭, Fm, and B♭m. Below the staff, the lyrics "Va - rú - ú - ú - ú - úδ" are written, with hyphens indicating where the notes are sustained. The score is divided into measures by vertical bar lines.





Musikalske virkemidler:

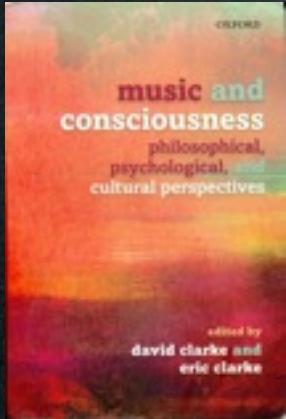
Oppadgående melodi og tonebevegelse, crescendo, høye noter, økning i rytmisk tetthet, nytt element, ekspressive harmonier.



Musikalske virkemidler:

Oppadgående melodi, arpeggio, crescendo,
nytt element, ekspressiv vokal og høye toner.

DISKUSJON:



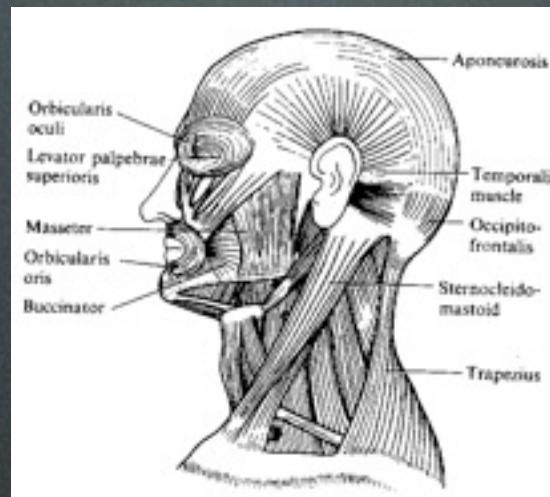
Kapittel 12:

Alicia Peñalba Acitores: «Towards a theory of proprioception as a bodily basis for consciousness in music»

David Clarke & Eric Clarke, 2011: Music and Consciousness: Philosophical, Psychological, and Cultural Perspectives

DISKUSJON:

Kroppslig spenningsbygging



KONKLUSJON:

Oppadgående melodiske linjer og tonebevegelser var et gjennomgående musikalsk virkemiddel der respondentene opplevde fysisk reaksjon, både i delen med selvvalgt musikk og delen med forhåndsvalet musikk.

Dette forklares best gjennom deltagelse av kroppslig bevegelse og vårt proprioceptive system i lytteopplevelsen.