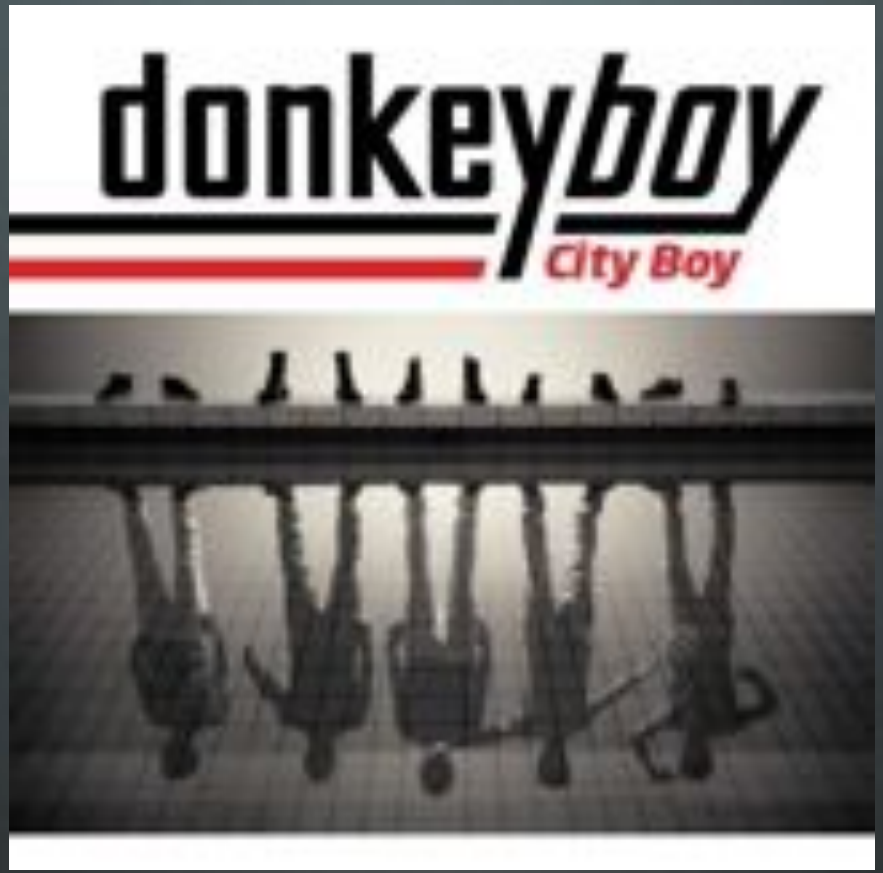
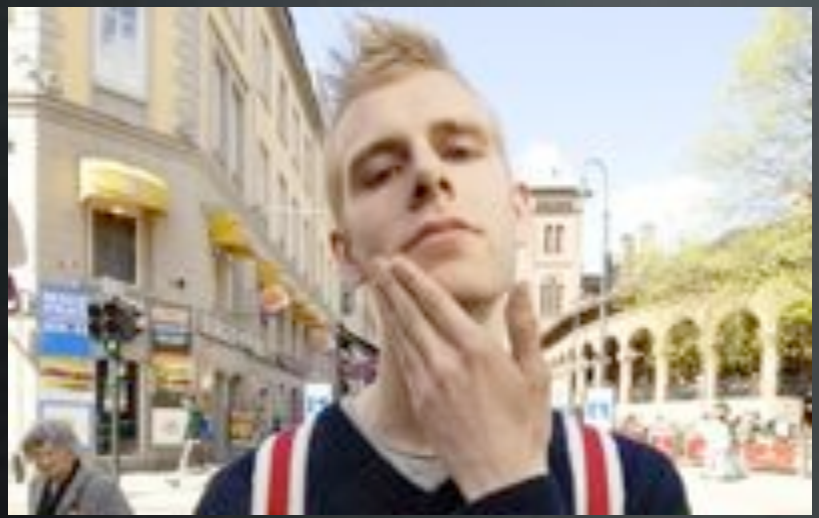
Musikk, rytme og bevegelse

Hans T. Zeiner-Henriksen
e-mail: h.t.zeiner-henriksen@imv.uio.no


donkeyboy
City Boy

Susanne Sundfør; «Rome» (2012)

Thomas Eriksen



Lars Vaular

FRA TOPP 20, RADHUSPLASSEN, 201

The PoumTchak Pattern:

Correspondences Between Rhythm, Sound, and Movement in Electronic Dance Music

Thelma Houston:
Don't Leave Me This Way (1976)

Cerrone:
Love in C minor (1976)

Trammps:
Disco Inferno (1976)

Baccara:
Yes Sir, I Can Boogie (1977)

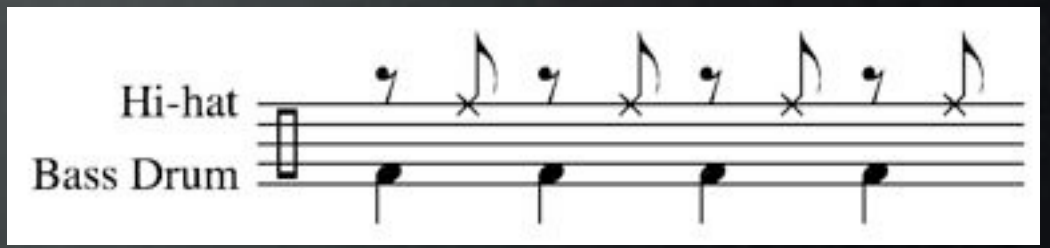
Donna Summer:
I Feel Love (1977)

Dan Hartman:
Instant Replay (1978)

Sylvester:
You Make Me Feel (Mighty Real) (1978)

Gloria Gaynor:
I Will Survive (1979)

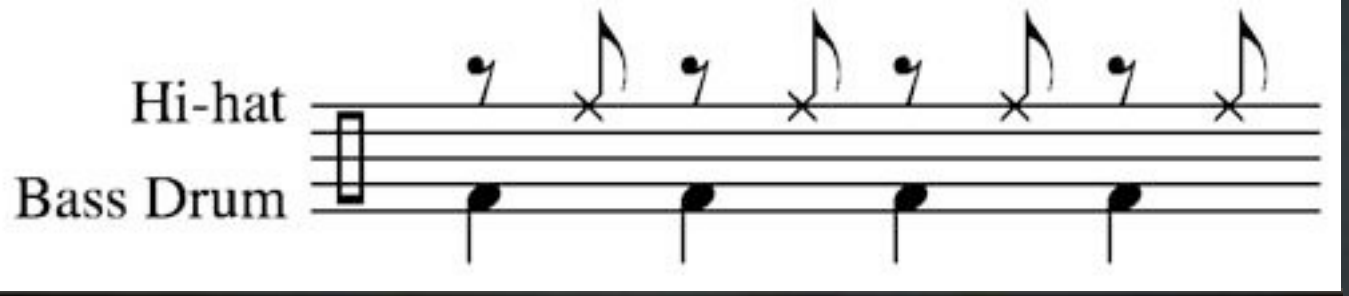
Abba:
Gimme! Gimme! Gimme! (A Man after Midnight) (1979)

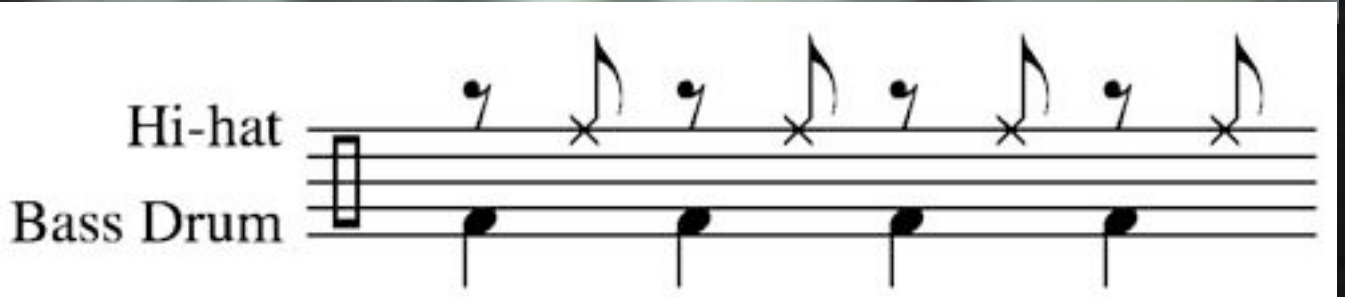


Leftfield: "Open Up" (1995)

Les Rhythmes Digitales: "Jacues Your Body (Make Me Sweat)" (1999)

Basement Jaxx: "Red Alert" (1999)

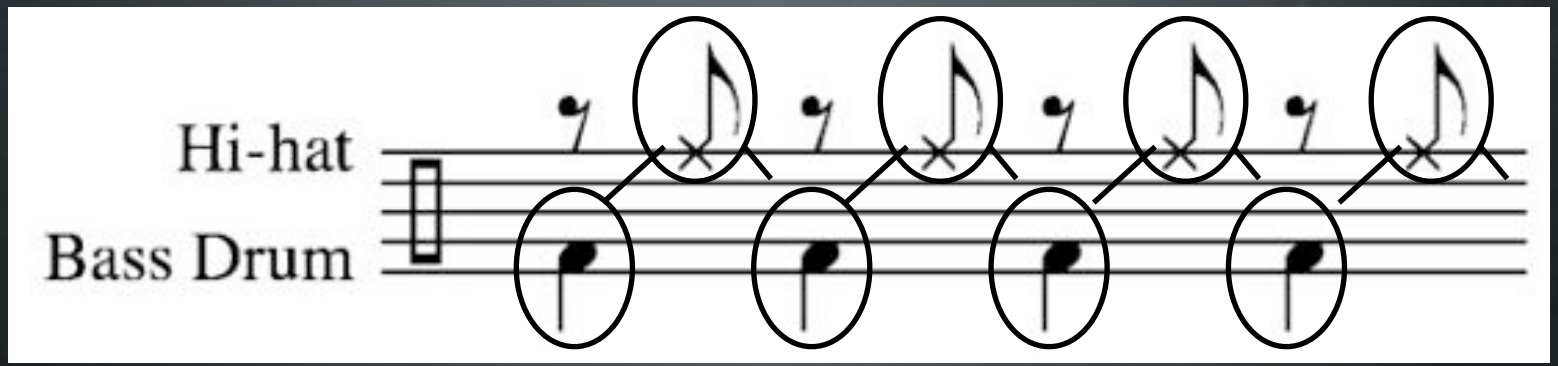




Chemical Brothers: "Star Guitar" (2002)

Daft Punk : "Around the World" (1996)

Röyksopp: "Poor Leno" (2001)


Hi-hat
Bass Drum

THE POUMTCHAK PATTERN

Svar på Undersøkelse om rytme og bevegelse

Dette er en undersøkelse i forbindelse med mitt avhandlingsarbeid. Jeg studerer sammenhenger mellom strukturer i musikk og bevegelsesmønstre.

Undersøkelsen utføres ideelt på følgende måte:

Sitt foran datamaskinen og sørg for at du har lyd - enten via øretelefoner eller høyttalere. (helst litt god lyd!)

1. Les spørsmålene.

2. Lytt til musikken og gjør deg kjent med lydene det spørres etter.

3. Start musikken på nytt og beveg hodet og/eller overkroppen uten å fokusere på spørsmålene.

4. Når en bevegelse er etablert fokuserer du på spørsmålene og bestemmer deg for svaralternativ.

Har du problemer med å forstå spørsmålet eller du ikke vet hva du skal svare benytter du Vet ikke-alternativet og går videre til neste spørsmål.

Lykke til!

Svarene i dette skjemaet er anonyme. Spørsmål markert med * er obligatoriske. Du må sende inn besvarelsen eller lagre den i løpet av 60 minutter (hvis ikke nullstilles skjemaet og det du har fylt ut slettes).

Send besvarelse | Avbryt

1.

1.1. Kjønn *
- Mann
- Kvinne

1.2. Alder *

2.

2.1. Primært utøver av *
- Pop/rock
- Jazz
- Folkemusikk
- Klassisk
- Annet

2.2. Primært lytter av *
- Pop/rock
- Jazz

- Folkemusikk
- Klassisk
- Annet

2.3. Lyttet/danset mye til house/dance/techno? *
- Ja
- Nei
- Noe

3. Chuck Berry: Maybellene (1955)

3.1. Lytt etter skarptrommeslaget. Beveg hodet og/eller overkroppen opp og ned. Går bevegelsen opp eller ned på skarptrommeslaget? *
- Opp
- Ned
- Vet ikke

3.2. Hvis du teller det du oppfatter er puls/telleenhet; ender skarptrommen på 2 og 4 eller mellom slagene (på og'n)? *
- 2 og 4
- Mellom slagene
- Vet ikke

4. The Beginning of the End: "Funky Nassau" (1971)

4.1. Lytt etter cymbalslaget som etter hvert repeteres mellom slagene. Beveg hodet og/eller overkroppen opp og ned. Går bevegelsen opp eller ned på cymbalslaget? *
- Opp
- Ned
- Vet ikke

5. Daft Punk: "Phoenix" (1996)

5.1. Beveg hodet og/eller overkroppen opp og ned. Går bevegelsen opp eller ned på basstrommeslaget? *
- Opp
- Ned
- Vet ikke

5.2. Fortsett bevegelsen når hi-hat kommer inn. Endrer bevegelsen retning? *
- Ja
- Nei
- Vet ikke

5.3. Går bevegelsen opp eller ned på hi-hatslaget? *
- Opp
- Ned
- Vet ikke

5.4. Oppleves bevegelsen annerledes etter at hi-hat kommer inn? *
- Ja
- Nei
- Vet ikke

5.5. Hvis ja, hvordan oppleves endringen?
- Sterkere dragning oppover
- Sterkere dragning nedover
- Kun sterkere, men ikke i noen spesiell retning
- Svakere
- Vet ikke

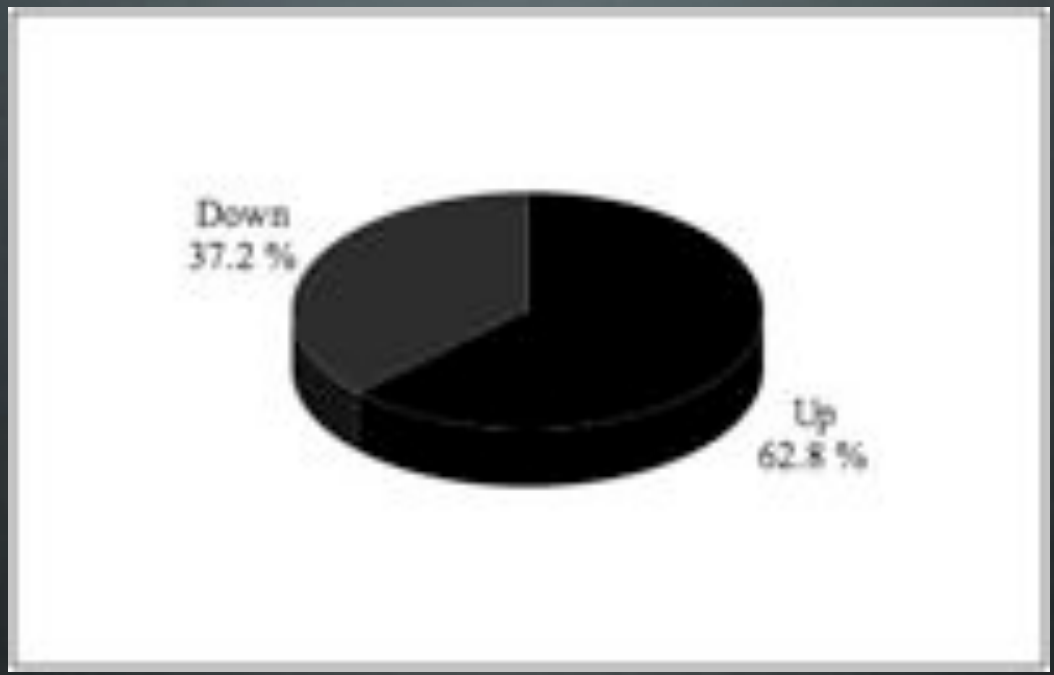
6. Chemical Brothers: "Star Guitar" (2002)

6.1. Halvveis i dette utdraget kommer en tilsvarende hi-hat-figur (som i forrige eks.) inn. Beveg hodet og/eller overkroppen opp og ned. Beveger du det opp eller ned på hi-hat-slaget? *
- Opp
- Ned
- Vet ikke

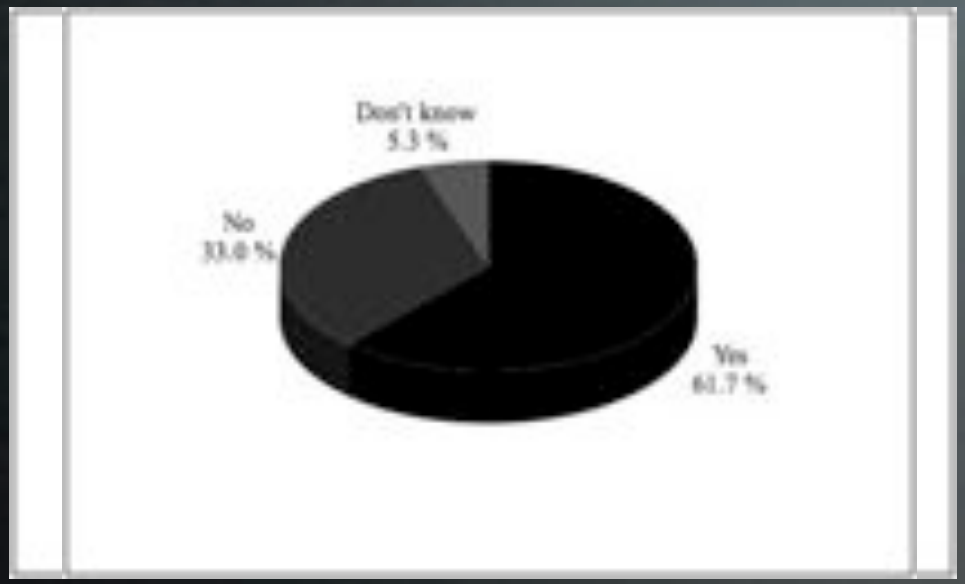
6.2. Oppleves bevegelsen annerledes etter at hi-hat kommer inn? *
- Ja
- Nei
- Vet ikke

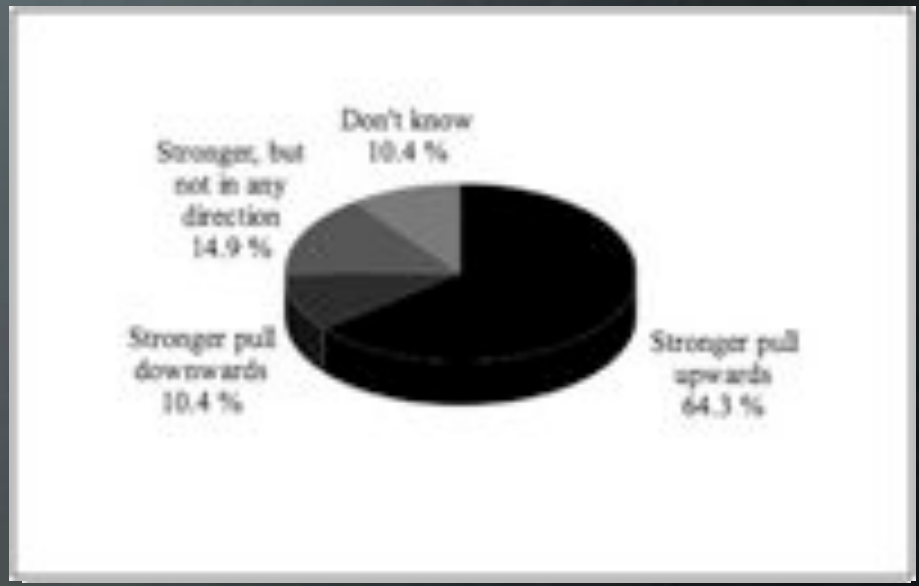
6.3. Hvis ja, hvordan oppleves endringen?
- Sterkere dragning oppover

Chuck Berry: “Maybellene” (1955)

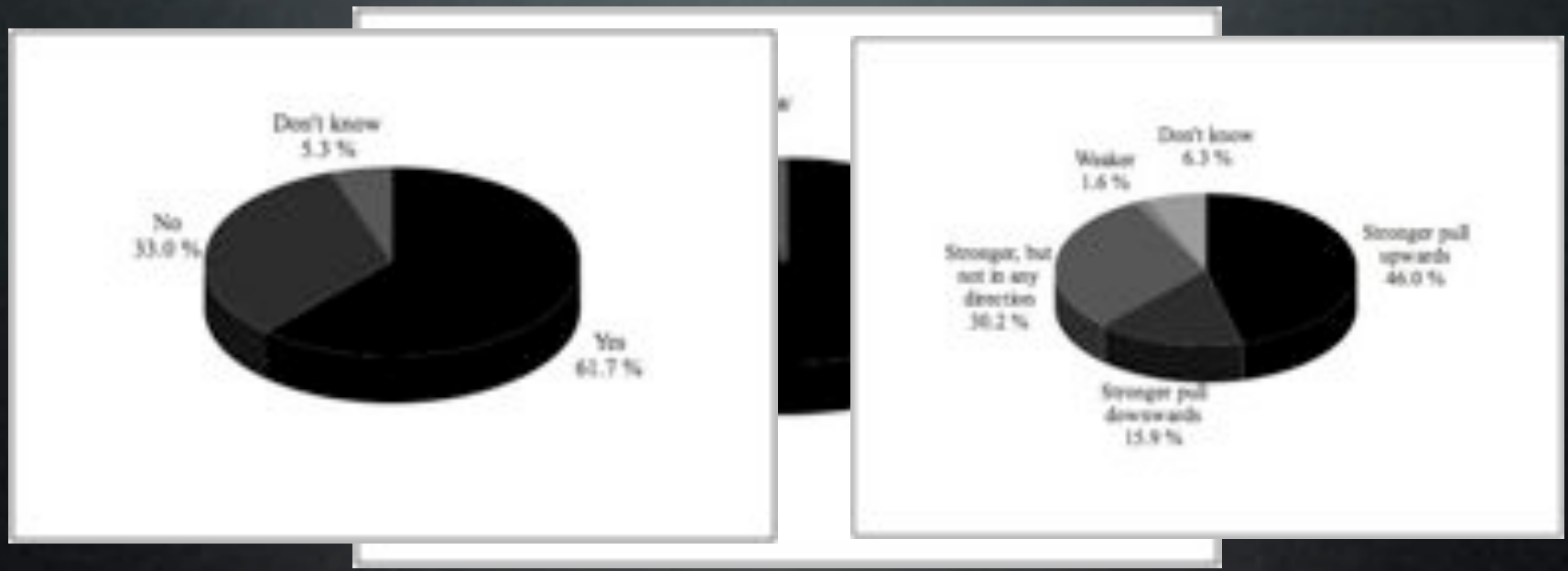


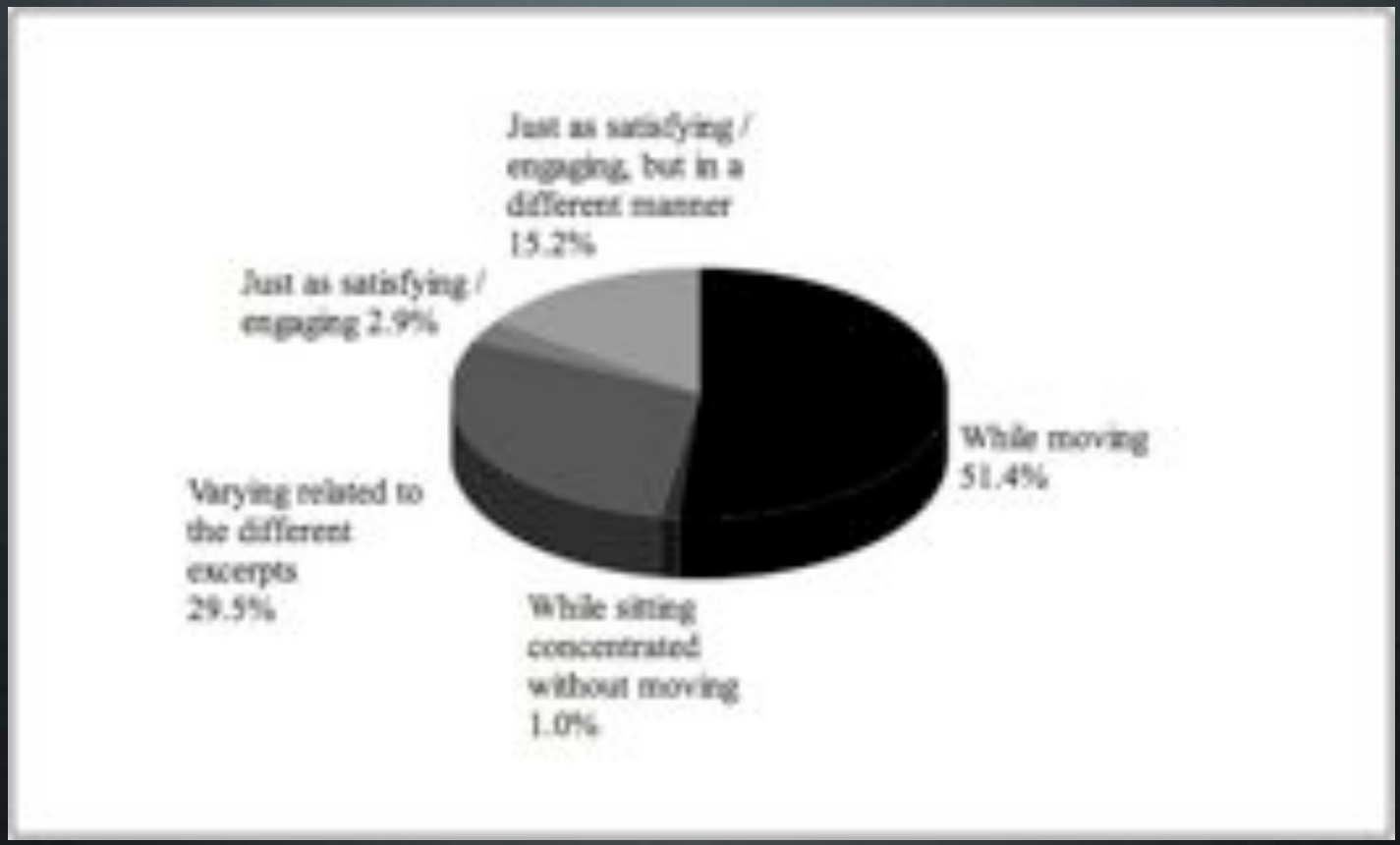
Daft Punk: “Phœnix” (1996)

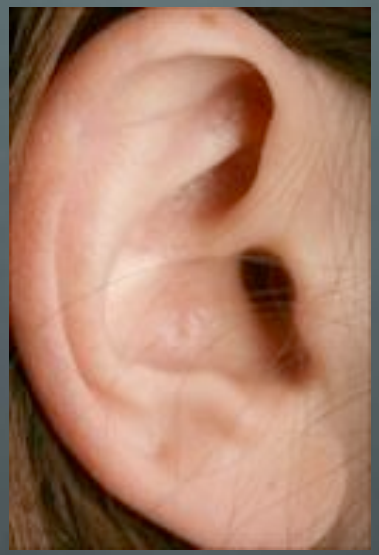
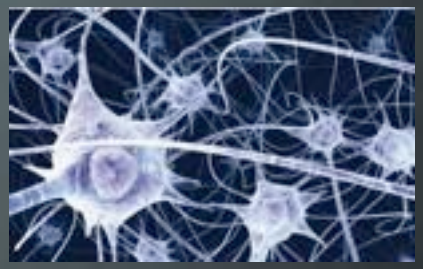




Chemical Brothers: “Star Guitar” (2002)

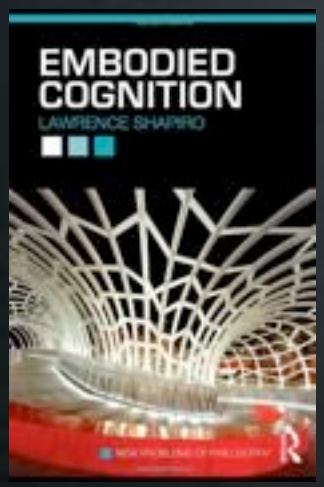



Just as satisfying / engaging, but in a different manner 15.2%
Just as satisfying / engaging 2.9%
While moving 51.4%
Varying related to the different excerpts 29.5%
While sitting concentrated without moving 1.0%

Embodied cognition

Lawrence Shapiro, 2011:



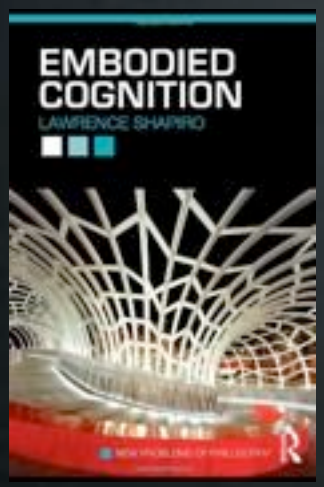
1. CONCEPTUALIZATION
The concepts on which an organism relies to understand its surrounding world depend on the kind of body that it has.

2. REPLACEMENT
An organism's body in interaction with its environment replaces the need for representational processes. Cognition does not depend on algorithmic processes over symbolic representations.

3. CONSTITUTION
The body or world plays a constitutive rather than merely causal role in cognitive processing.

Embodied cognition / kroppsorientert tenkning

Lawrence Shapiro, 2011:

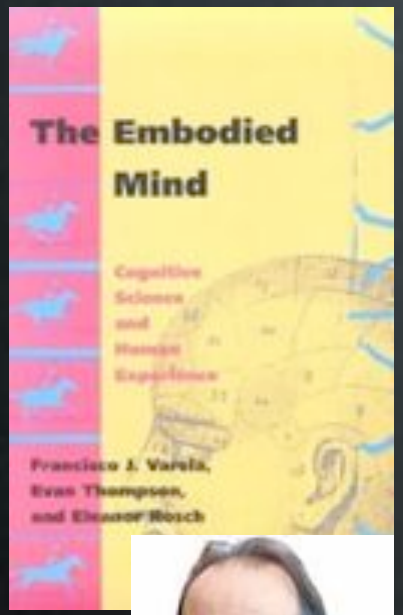


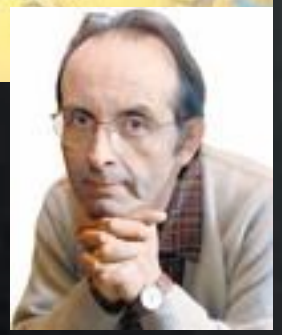
1. BEGREPSDANNELSE
De begreper vi bruker for å forstå den verden vi lever i avhenger av hva slags kropper vi har.

2. ERSTATNING
Vår kropps interaksjon med våre omgivelser erstatter behovet for representerende prosesser. Tenkning baserer seg ikke på algoritmiske prosesser med symbolske representasjoner.

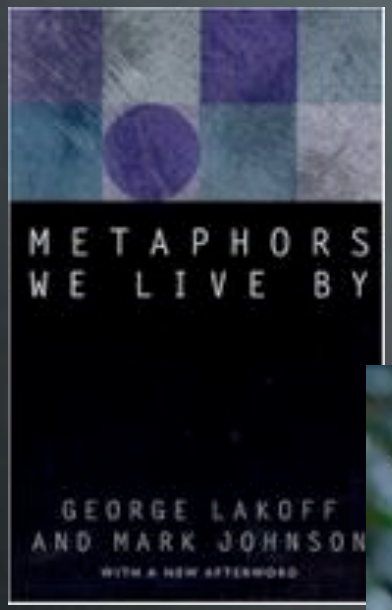
3. OPPBYGNING
Kroppen eller den verden vi omgir oss med spiller en grunnleggende heller en bare årsaksmessig rolle i kognitive prosesser.

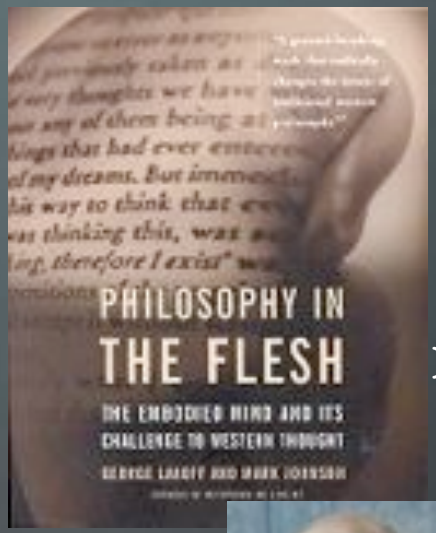
1. CONCEPTUALIZATION



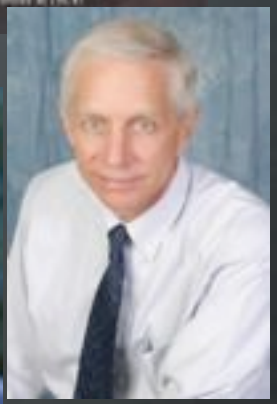


Francisco Varela
(1946-2001)



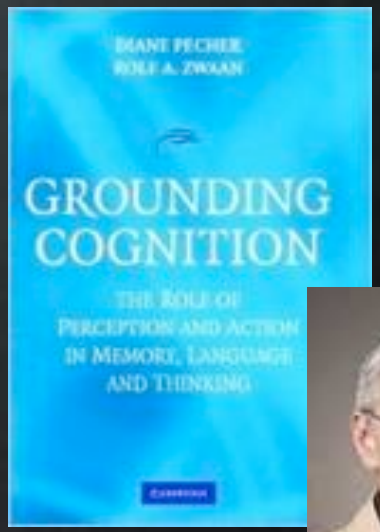


George Lakoff



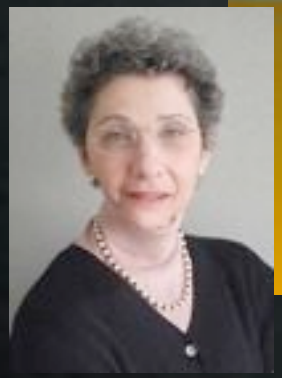
Mark Johnson

Lawrence Barsalou

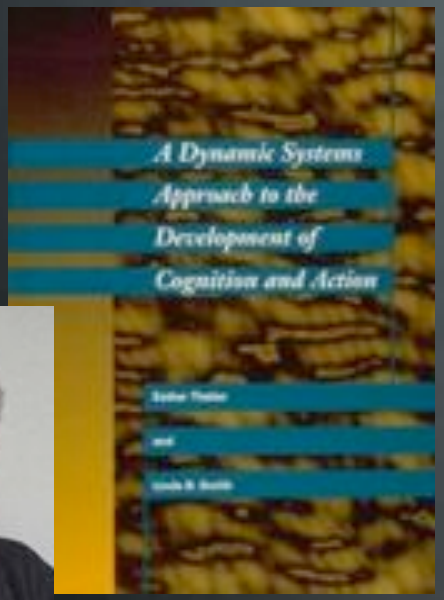


Arthur Glenberg

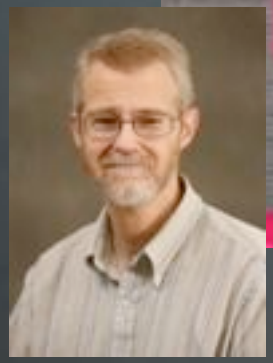
2. REPLACEMENT



Esther Thelen
(1941-2004)



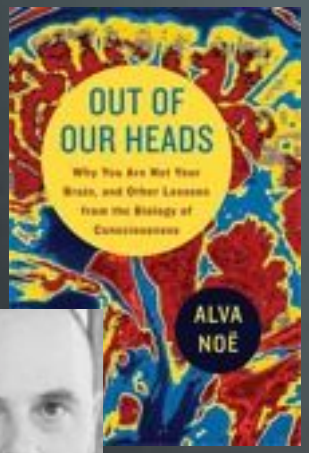
Tim van Gelder



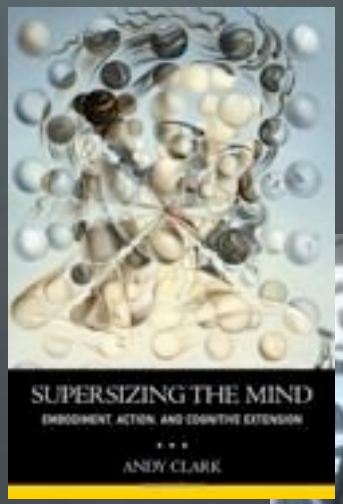
Randall Beer

Rodney Brooks

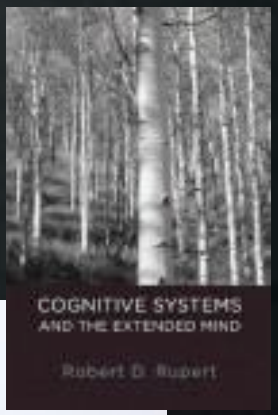
3. CONSTITUTION



Alva Noë



Andy Clark



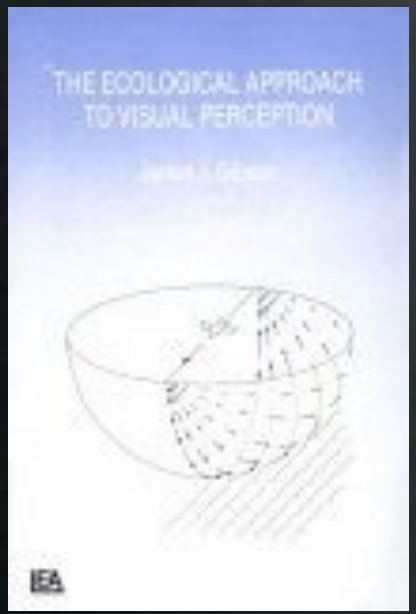
Robert Rupert

Økologi-orientert persepsjonsteori

James J. Gibson (1904-1979)

* Affordance

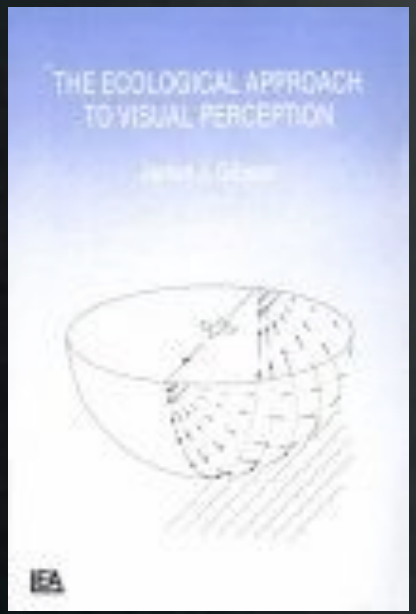
* Persepsjon - aksjon

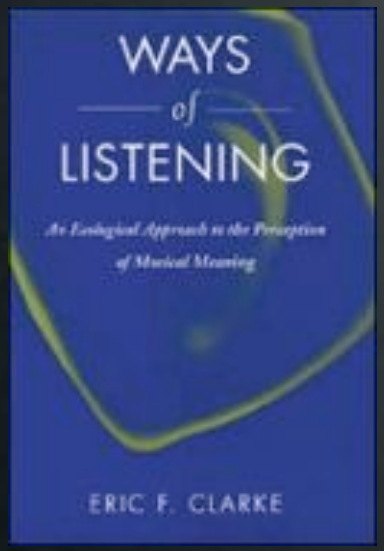


Økologi-orientert persepsjonsteori

"Perceiving is an act, not a response, and act of attention, not a triggered impression, an achievement, not a reflex"

Gibson, J. J., 1979. The Ecological Approach to Visual Perception. P. 127.





"The interdependence between perception and action that is emphasized in ecological theory suggests that every perceptual experience will bear the trace of an action component. In the case of music, these traces are not hard to find – they are displayed overtly in the foot-tapping, head-nodding and body-swaying that are commonly observed in even the constrained circumstances of the Western art music tradition."

(Eric F. Clarke, 2005, *Ways of Listening*, p.62)

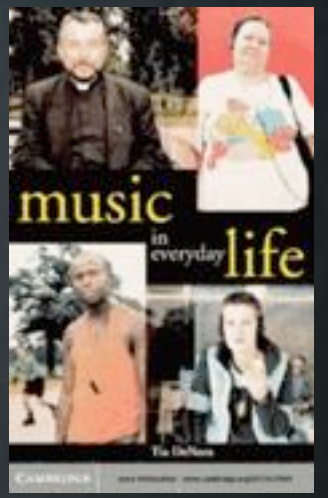
Sandor 7 måneder + Stevie Wonder: “Superstition”

Amniotic sac
Chorionic sac
Eyelid
Ear

Jessica Philips-Silver and Laurel J. Trainor (2005): "Feeling the Beat: Movement Influences Infant Rhythm Perception", Science 308, 1430 (2007) "Hearing what the body feels: Auditory encoding of rhythmic movement." Cognition 105, 533-546.

"Parallel results from adults and infants suggest that the movement-sound interaction develops early and is fundamental to music processing throughout life."

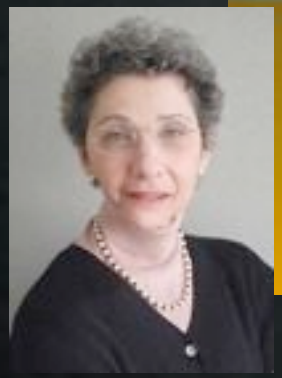
Tia DeNora (2000) “Music in Everyday Life”



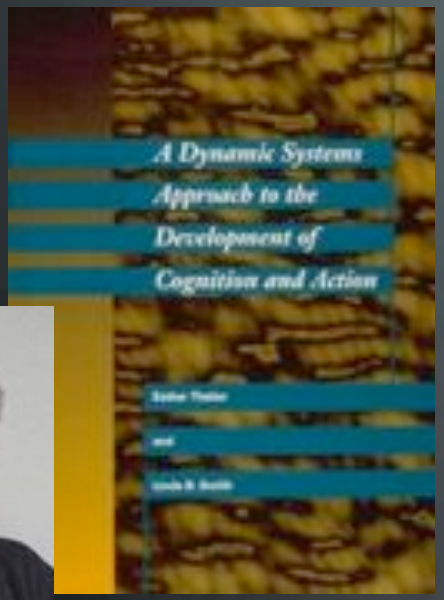
LeeEllen Friedland (1983) “Disco: Afro-American Vernacular Performance” in *Dance Research Journal*, Vol. 15, No 2.

1. Being rhythmic
2. Movement play
3. Dancing

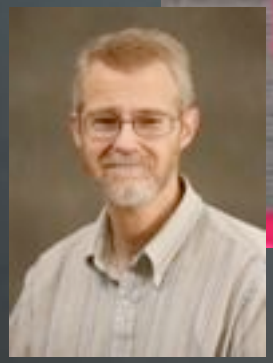
2. REPLACEMENT



Esther Thelen
(1941-2004)



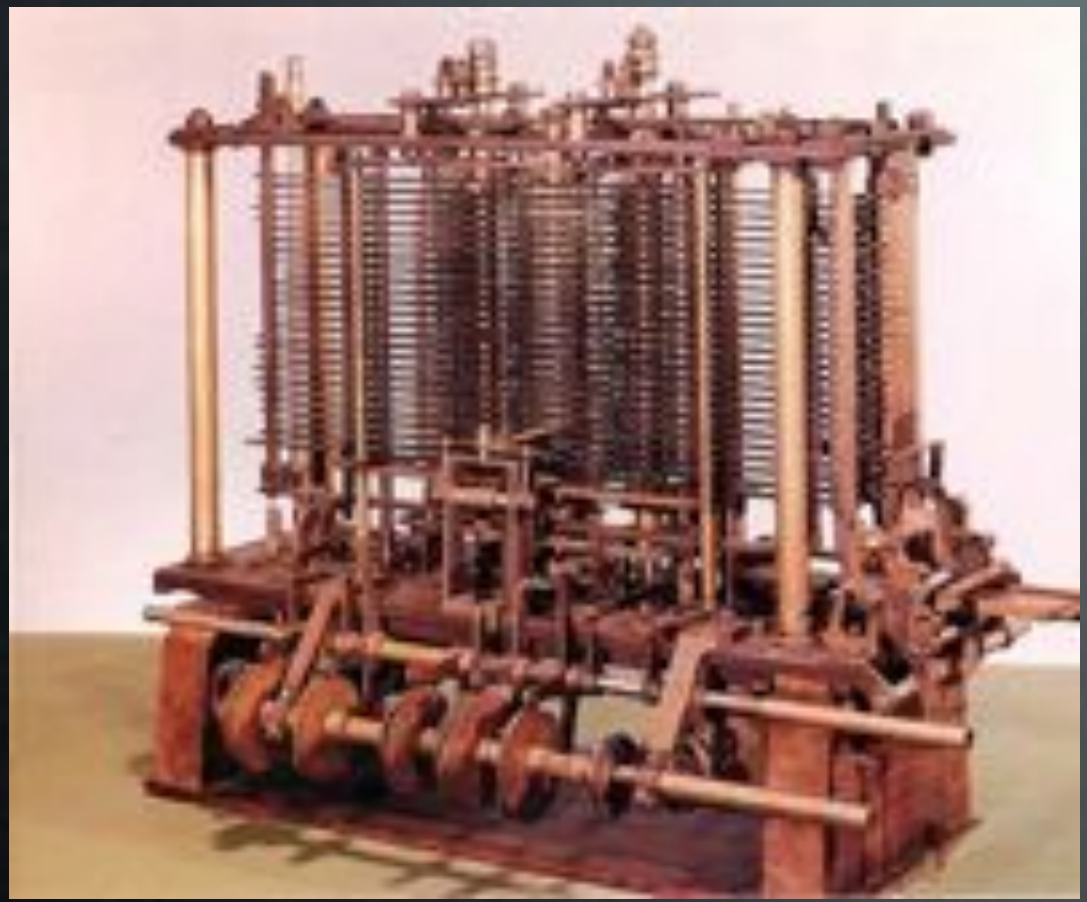
Tim van Gelder



Randall Beer

Rodney Brooks

Turings datamaskin versus Watts sentrifugalregulator



Entrainment

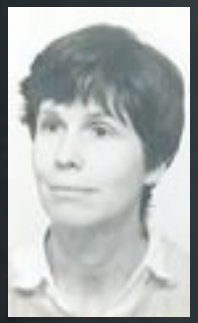
Entrainment

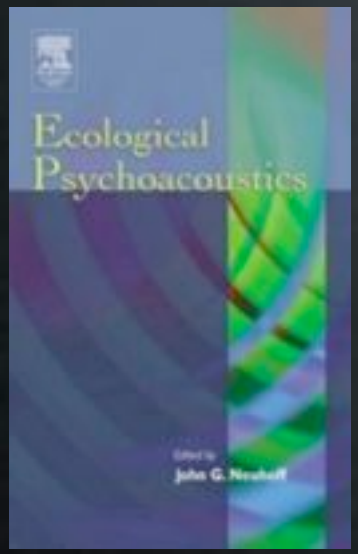
Christian Huygens (1629-1695)

Entrainment

Én rytme drives eller synkes av en annen (ekstern).

Rytmen i musikken (ekstern rytme) setter i gang
en rytme i kroppen (intern rytme).





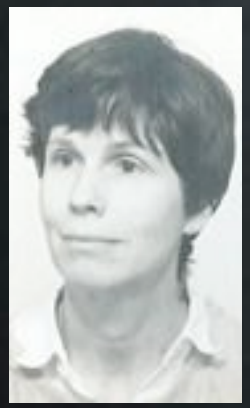
Mari Riess Jones

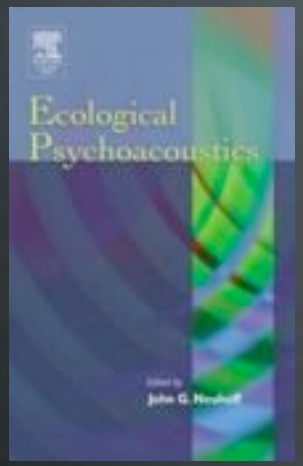
Rhythmic organisms interact, more or less effectively, with dynamic flow patterns of events via *entrainment*: An event's driving rhythm shapes an organism's driven rhythm through adaptations of period and phase. This entrainment process extends to rhythms that reflect the ebb and flow of attending energy.

Jones, M. R., 2004, Attention and timing. In J. G. Neuhoff (ed.): *Ecological psychoacoustics*..49-85. P. 50

I hvilken grad tar/får de ulike lydene i musikken vår oppmerksomhet?

I hvilken grad tar/får de ulike lydene i musikken vår oppmerksomhet?





Mari Riess Jones:
"Attention and Timing "

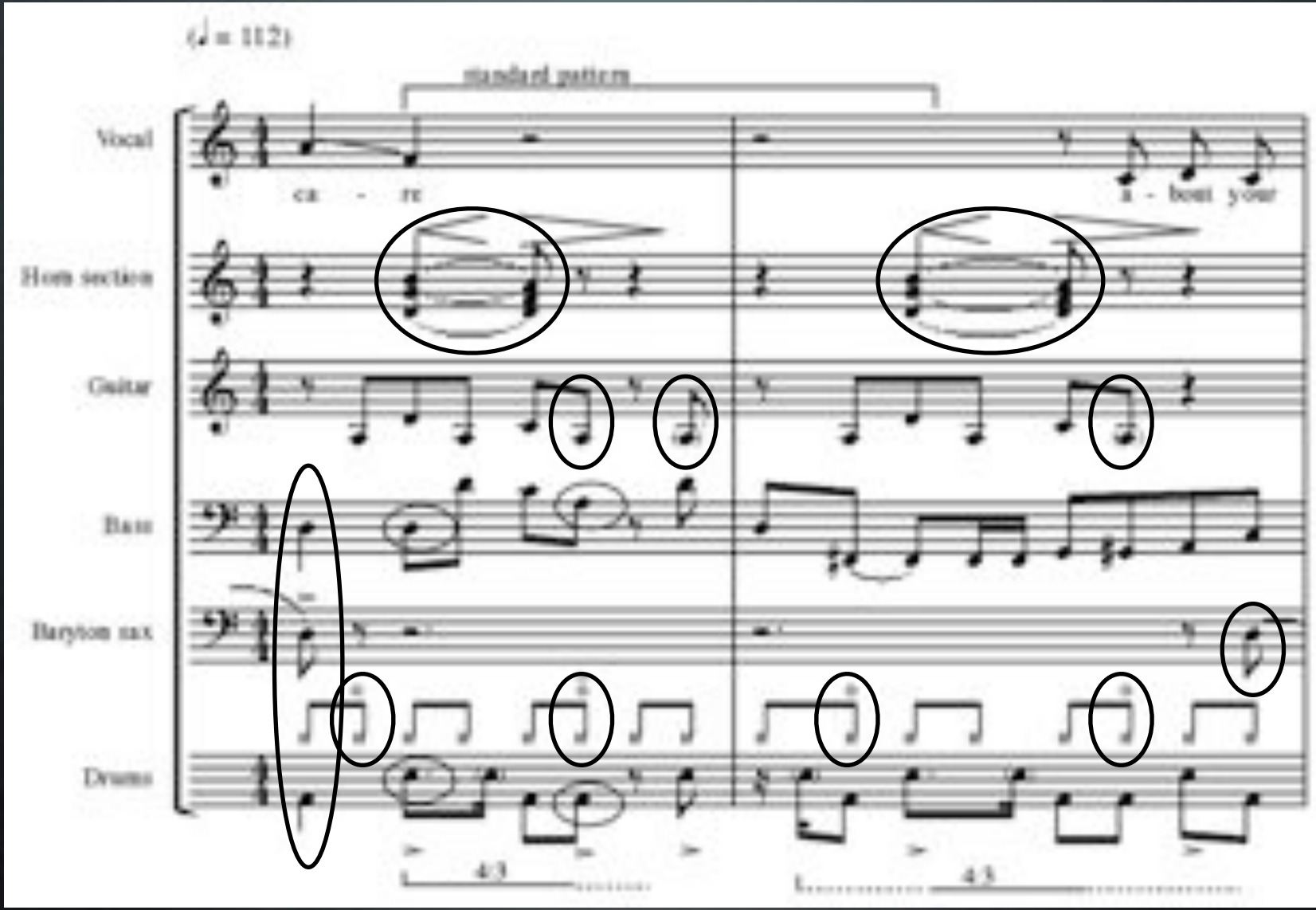
* Oppmerksomhet
* Forventning

DAT: Dynamic Attending Theory

Hvilke lyder i musikken er vesentlige?

*Gjentagende lyder, toner, aksentueringer, etc. danner forventninger og former vår oppmerksomhet.

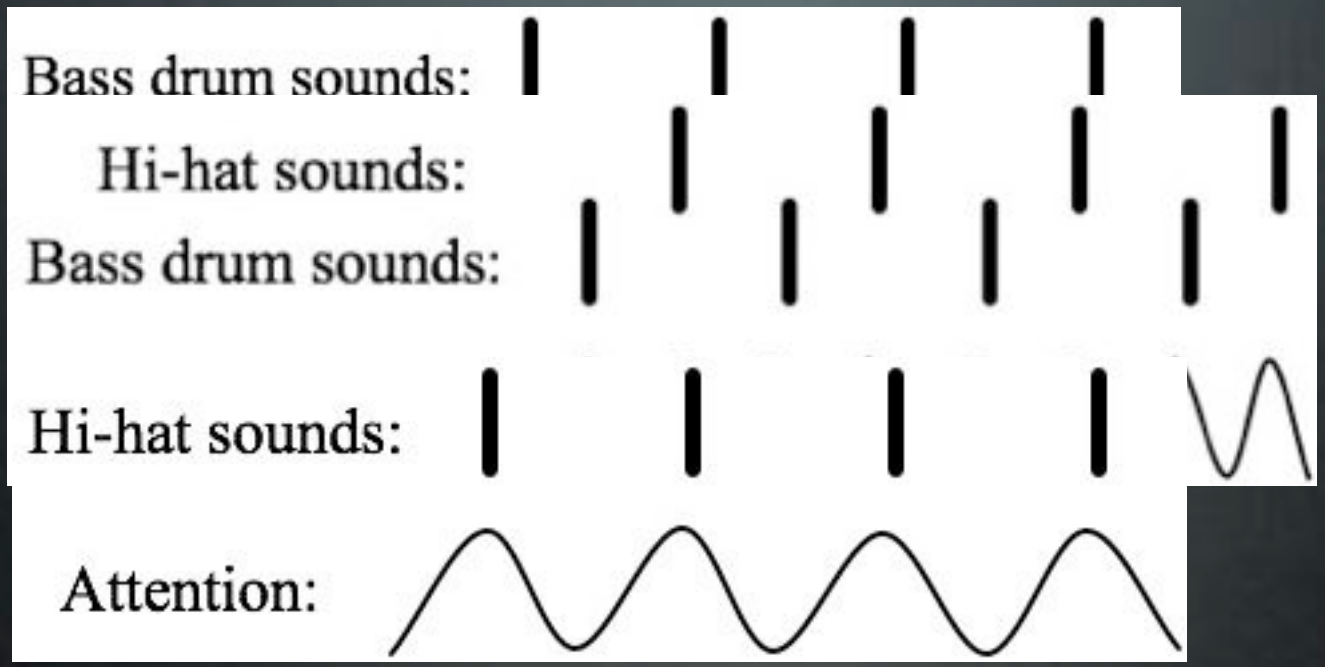
Dynamic system theory: «attractor points»

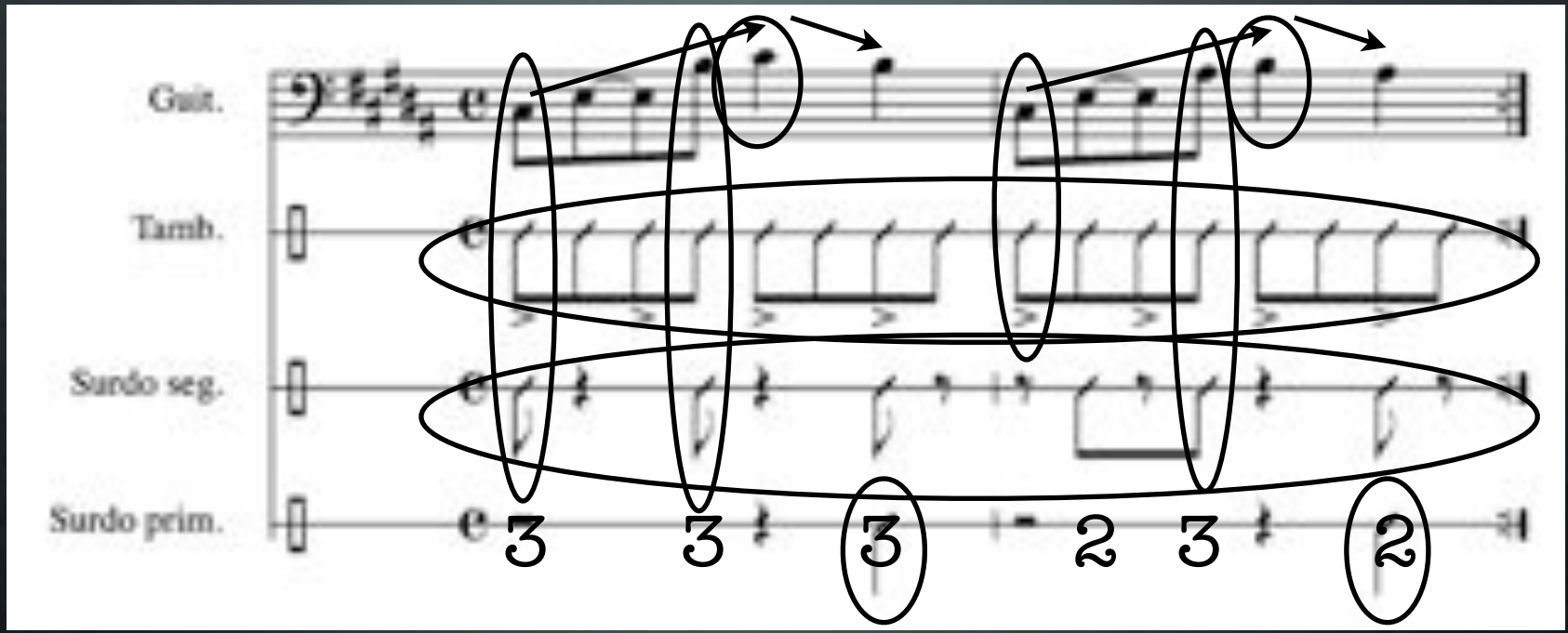


Groove from James Brown: Cold Sweat (1967) - tempo 112 bpm

From Anne Danielsen (2006): *Presence and Pleasure. The Funk Grooves of James Brown and Parliament*, p. 76.

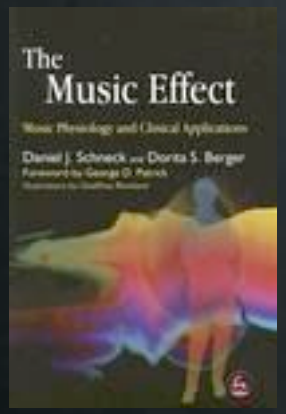
Oppmerksomhetspunkter/ «tiltrekningspunkter» (attractor points):




Guit.
Tamb.
Surdo seg.
Surdo prim.
3
3
3
2
3
2

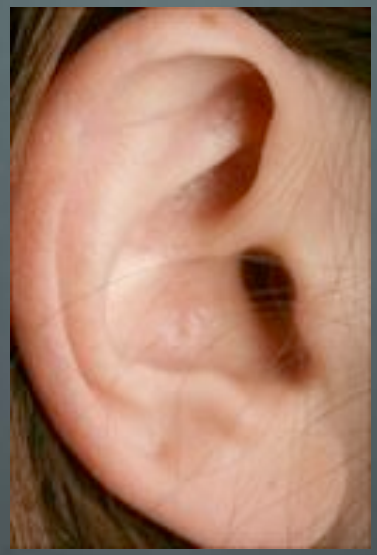
Entrainment -> bevegelser?

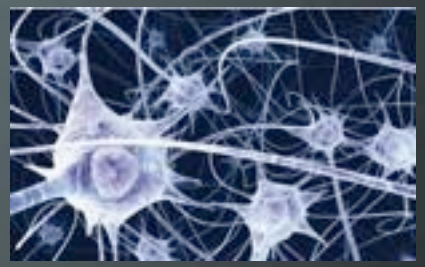
Bevegelse skjer ved at nervesignaler gir beskjed til muskelen om å trekke seg sammen.

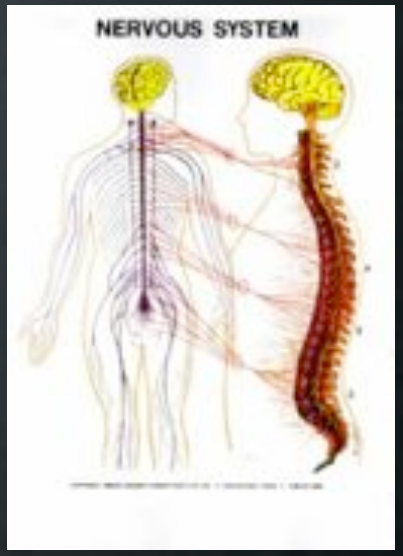


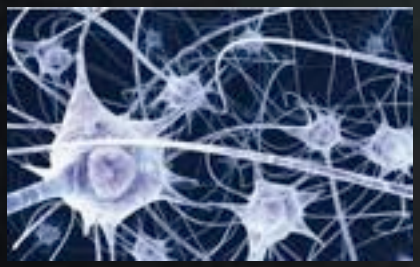
"Rhythmic pulsation embodies a consistent symmetrical balance of energy output, of fall and rebound . . . of tension and relaxation. Rhythmic vibration in music involves the same steady stream of force-rest-force-rest, of systematic strong and weak impulses, of alternating flexion (contraction), release (relaxation), and extension as in the case for paired and coupled muscular behavior."

Daniel J. Schneck & Dorita S. Berger. 2006, *The Music Effect: Music Psychology and Clinical Application*. Jessica Kingsley Publisher. S. 139.





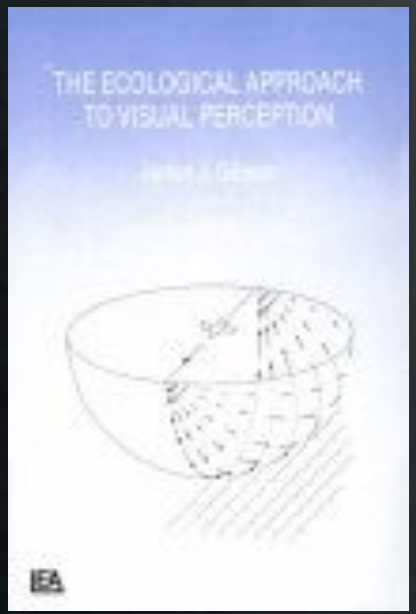

NERVOUS SYSTEM



Persepsjon relatert til økologi

James J. Gibson (1904-1979)

* Perseptuell læring



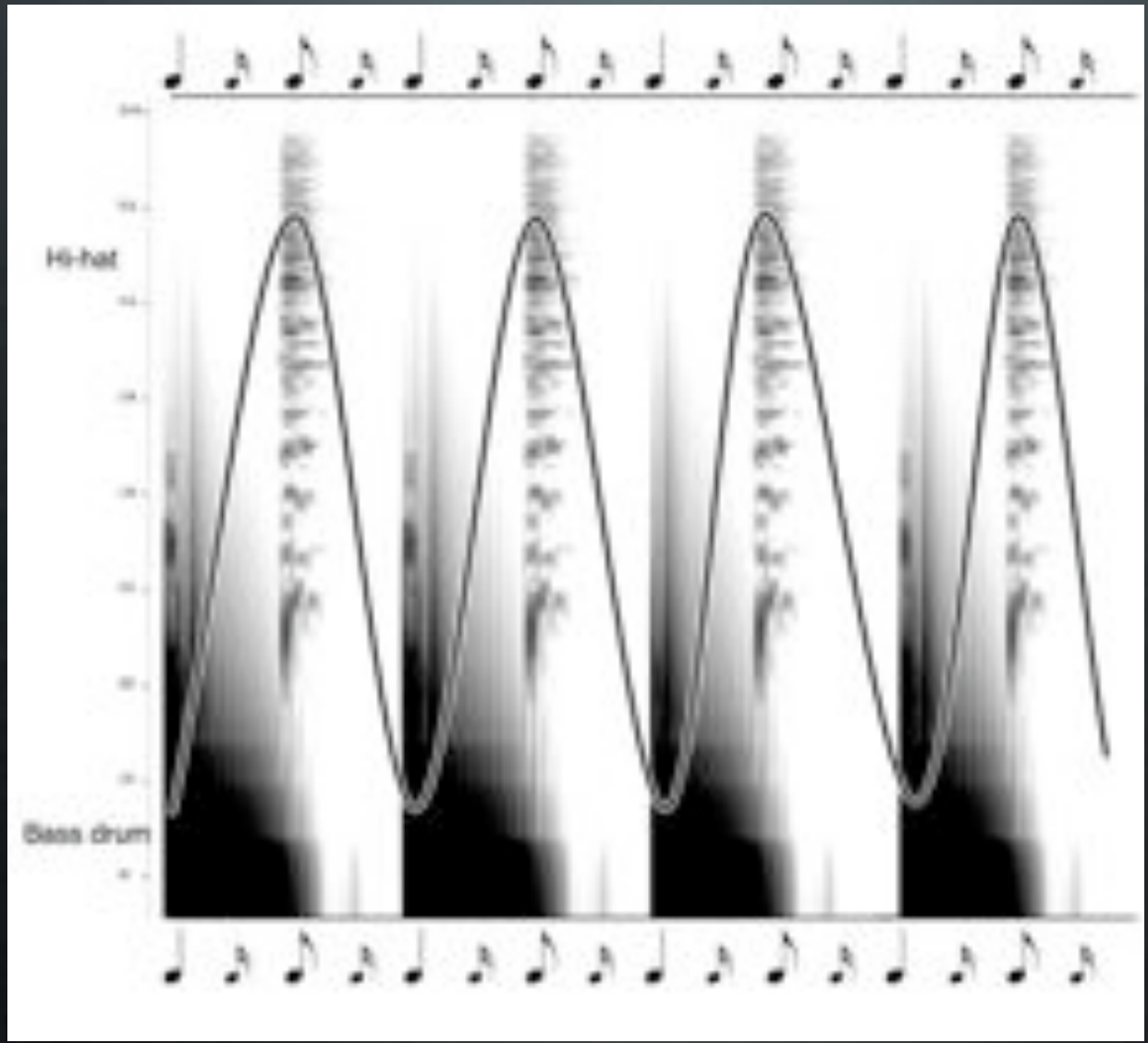
Analyse av musikk basert på
teorier om musikk og bevegelse.

Kap. 6: Rytme

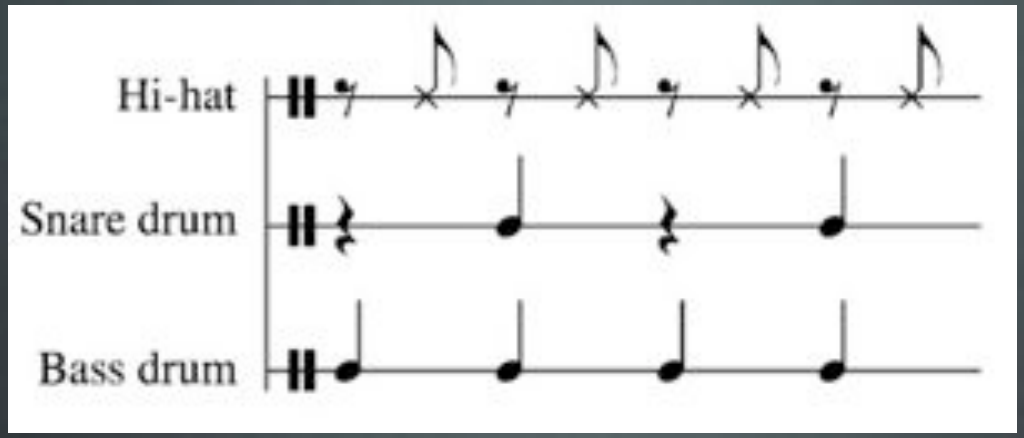
Kap. 8: Sound/lyd

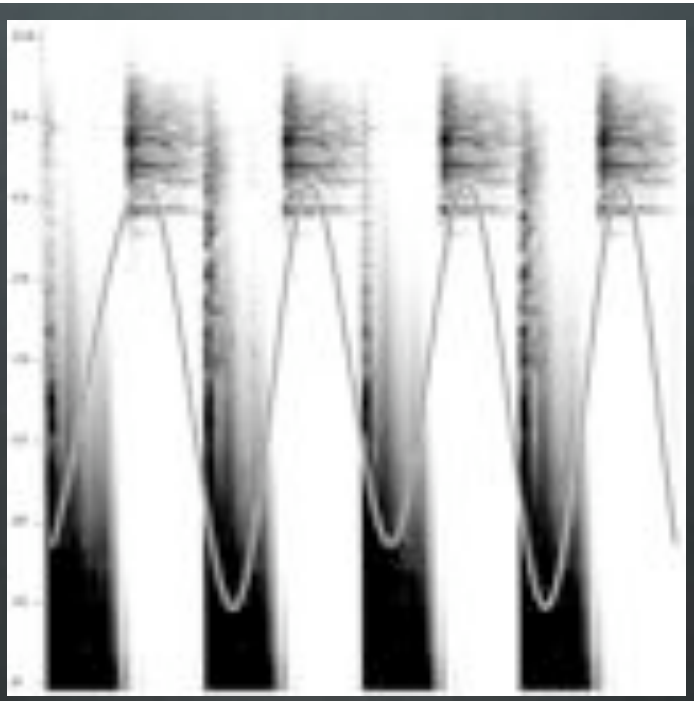
Entrainment - Vertikalitet

Oppmerksomhetspunkter:

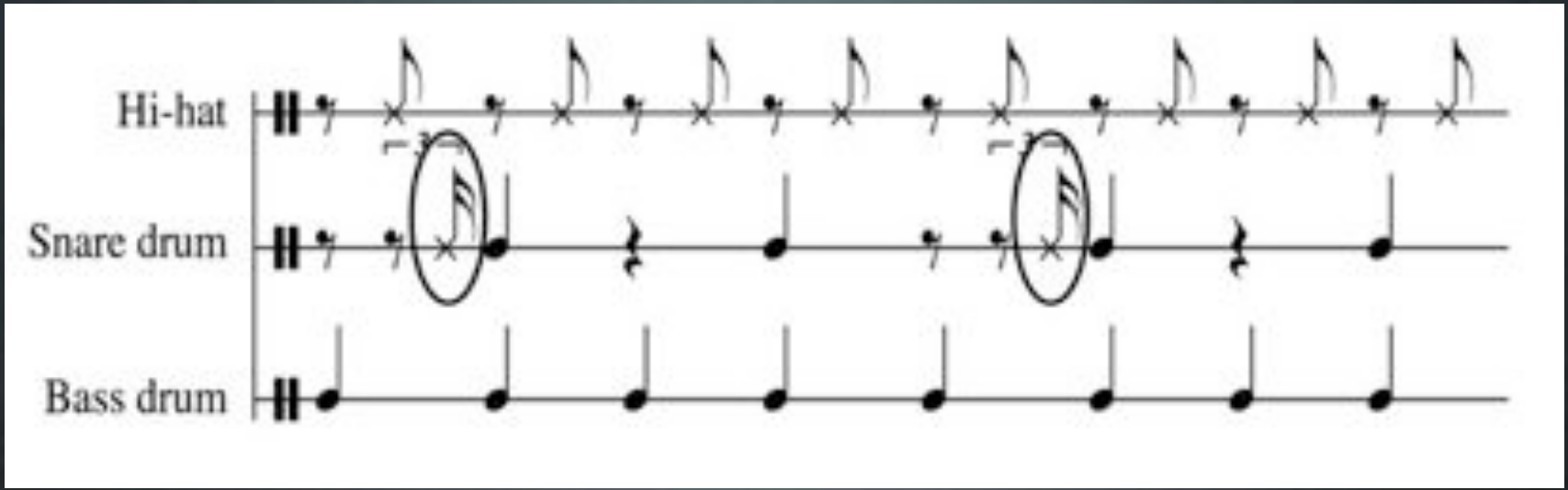


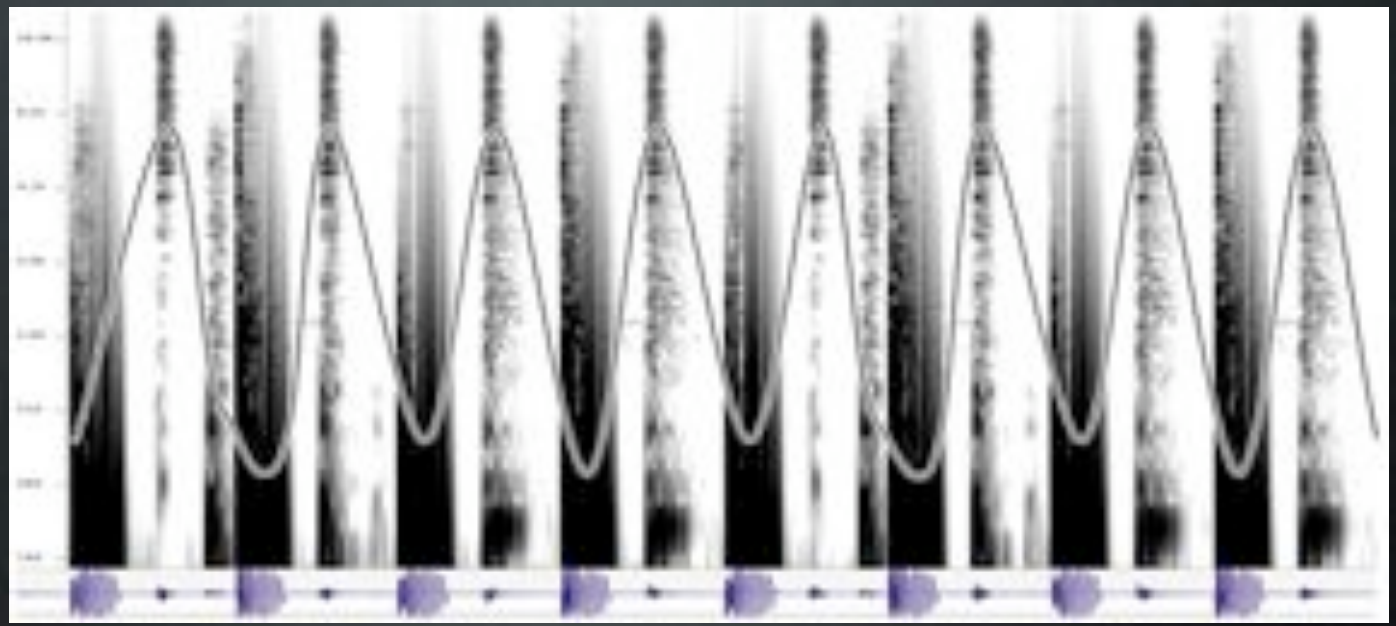
Variasjon





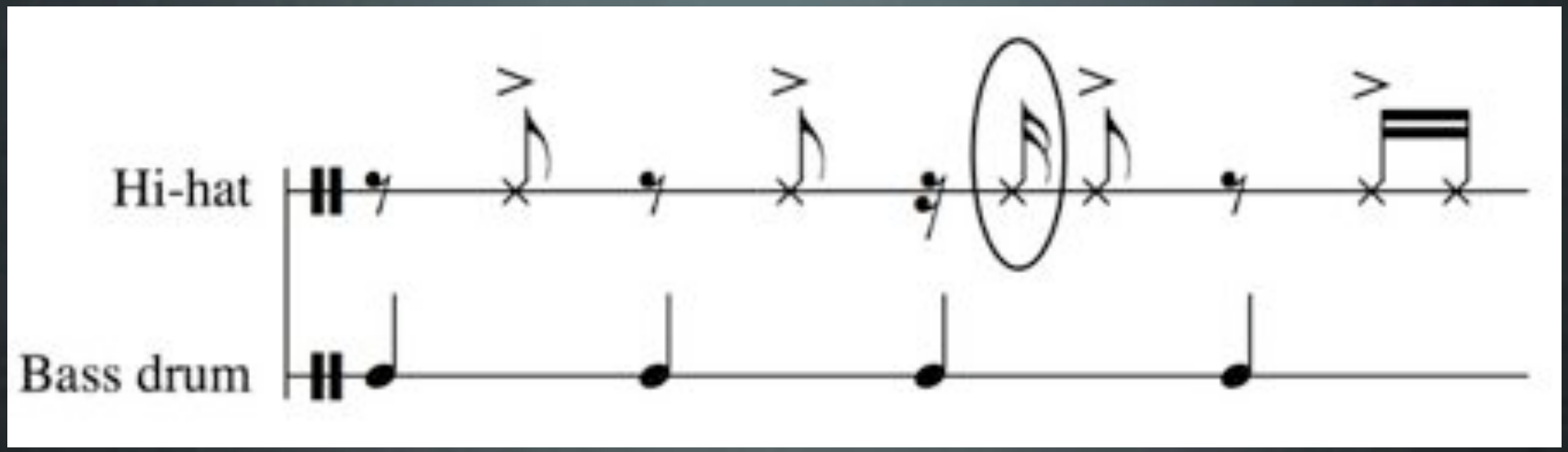
Deep Dish feat. Everything but the Girl: “The Future of the Future (Stay Gold)” (1998)

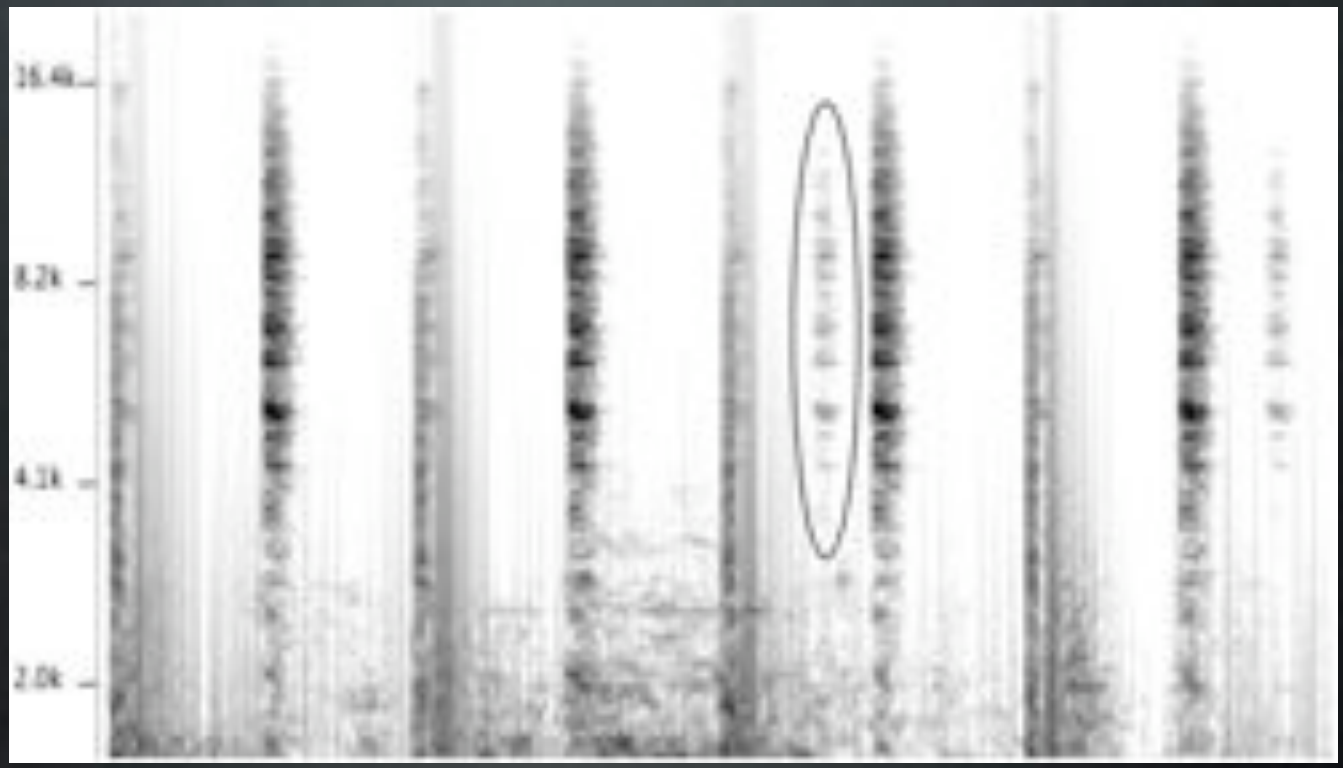




Shazz: “Fallin’ In Love” (PT. G Remix) (2001)

Bpm: 127





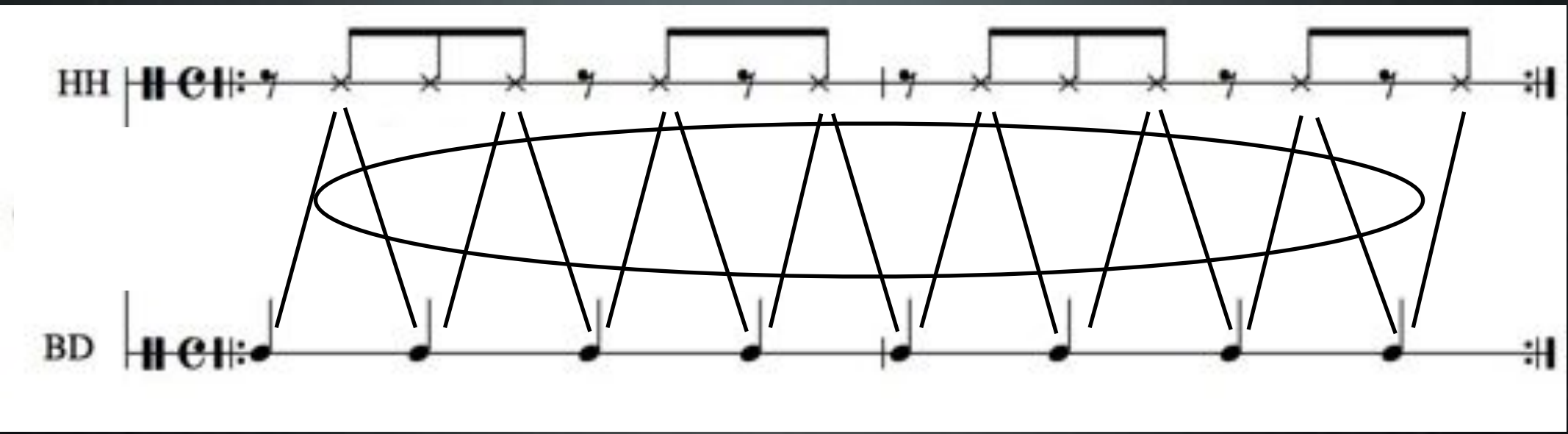
Boogie Drama: “Hypnofunk” (2002)

Bpm: 125

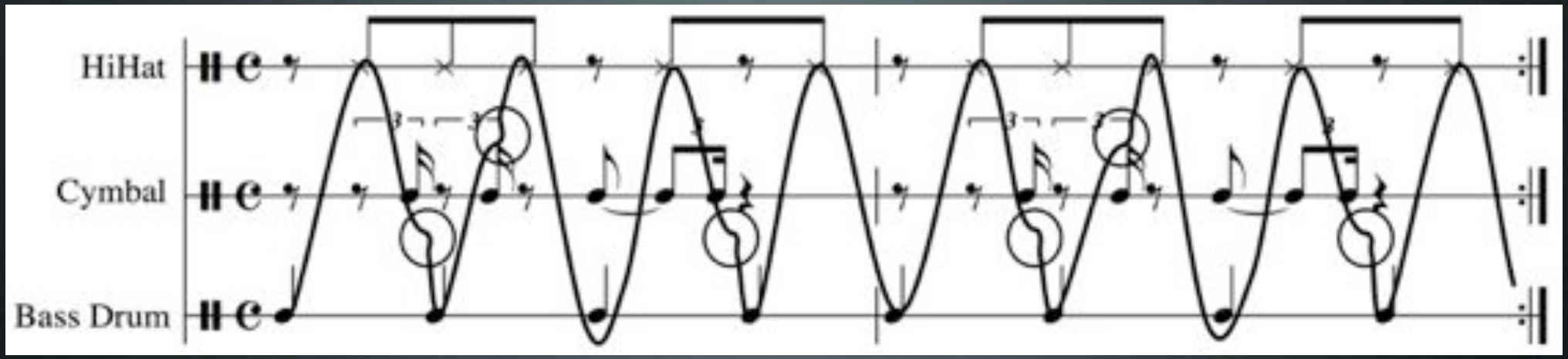
Utfyllende temaer / Spenningspunkter:

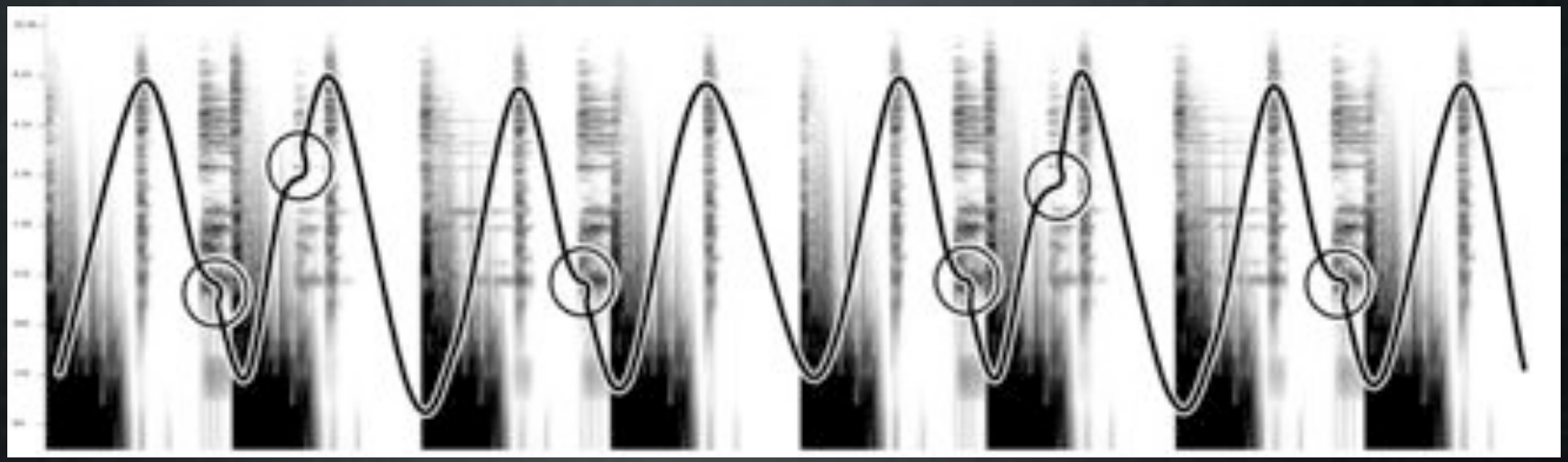
Basement Jaxx: “Jump’N’Shout”, 1999

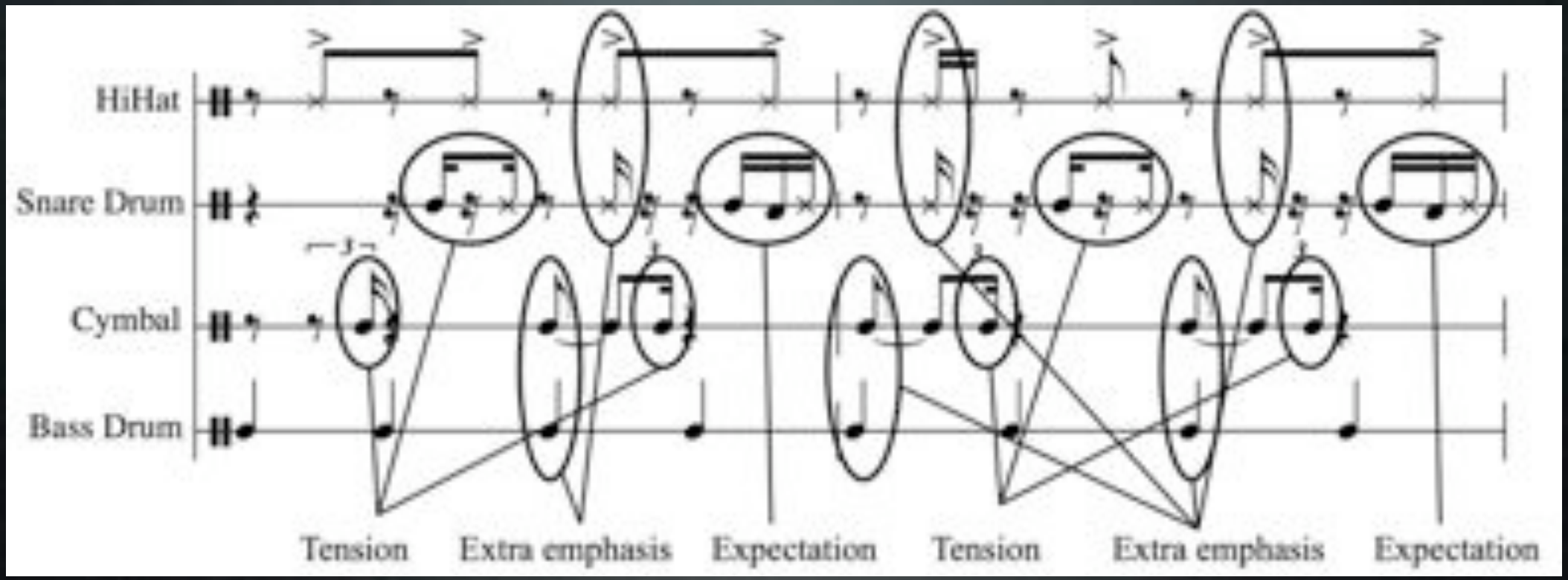
Takt 1-4:

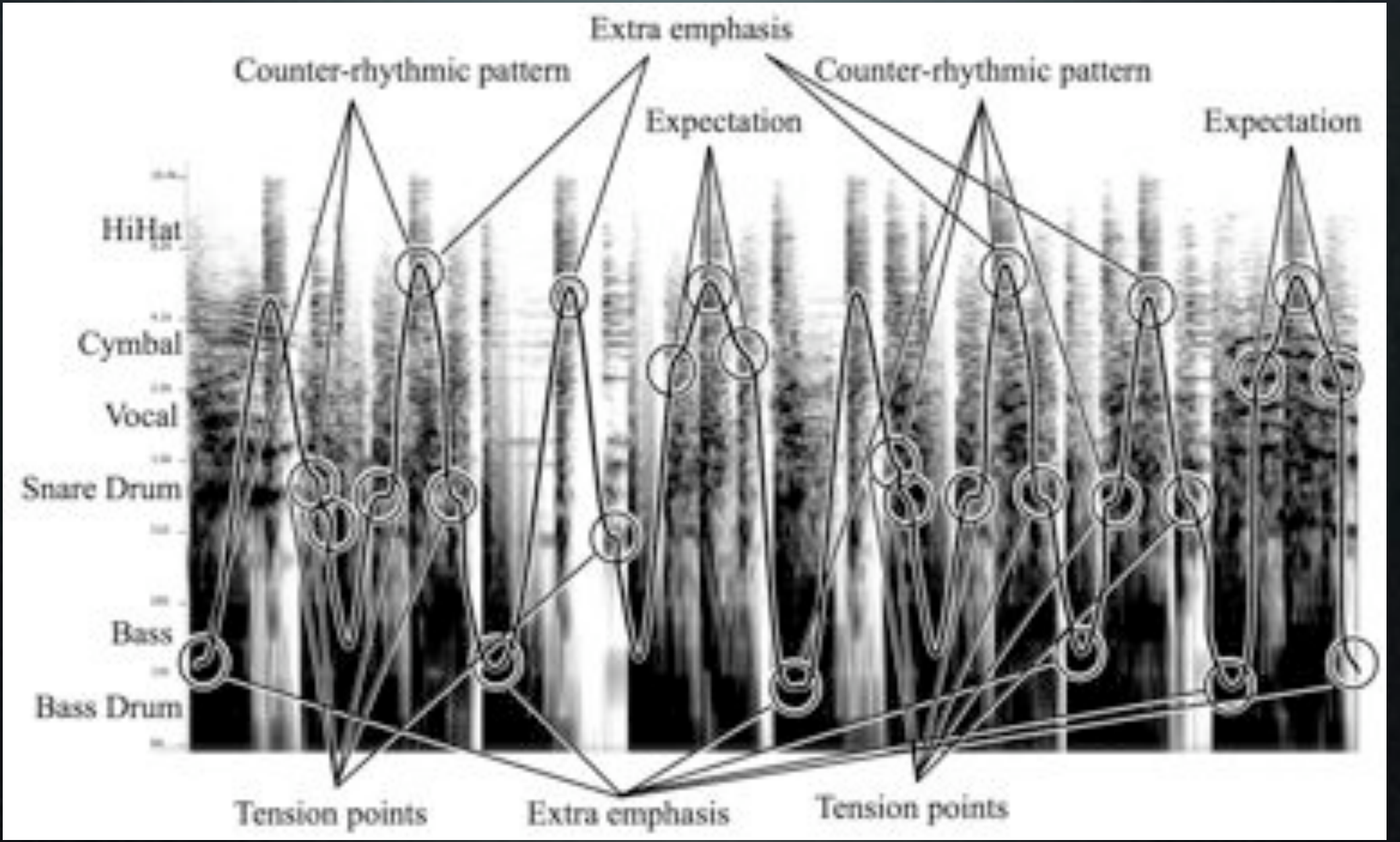


1. Original
2. Cymbal fjernet
3. HiHat fjernet


HiHat
Cymbal
Bass Drum

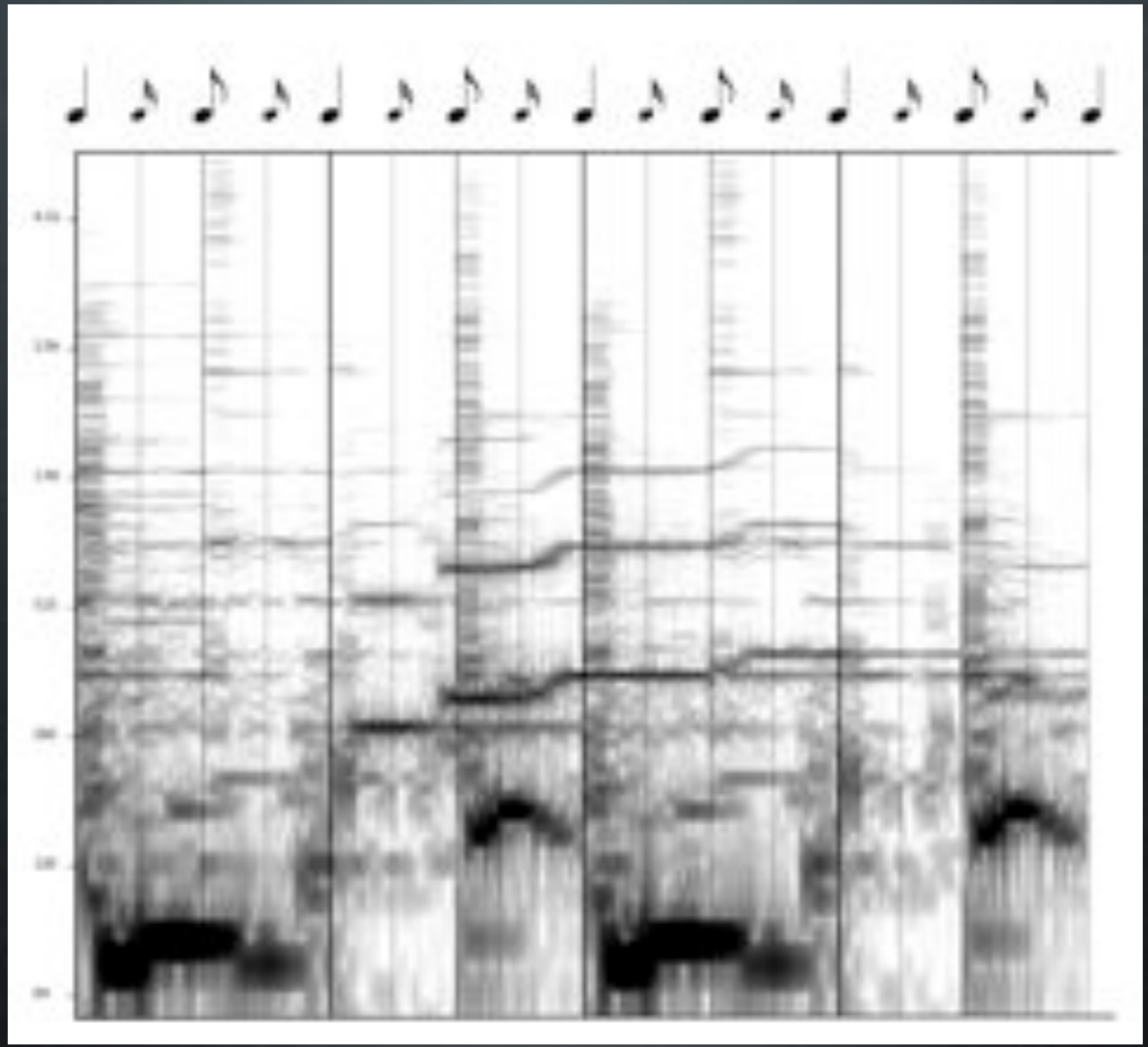



HiHat
Snare Drum
Cymbal
Bass Drum
Tension
Extra emphasis
Expectation
Tension
Extra emphasis
Expectation

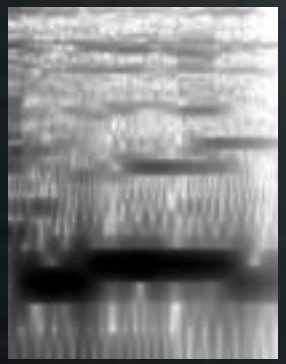

Extra emphasis
Counter-rhythmic pattern
Counter-rhythmic pattern
Expectation
Expectation
HiHat
Cymbal
Vocal
Snare Drum
Bass
Bass Drum
Tension points
Extra emphasis
Tension points

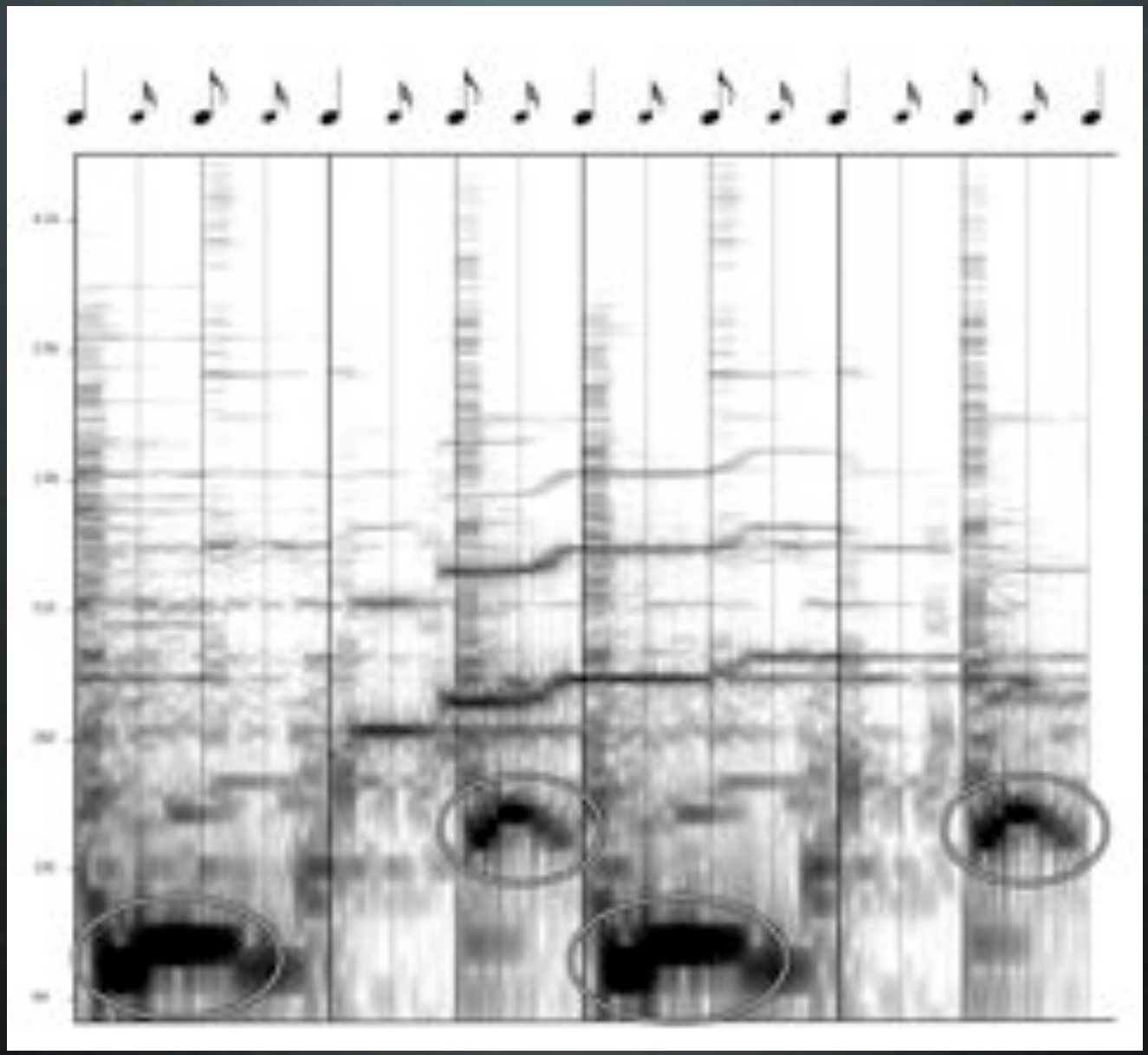
Gotye: «Hearts a Mess» (2007)

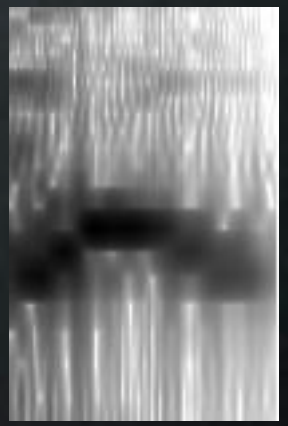
Gotye: «Hearts a Mess» (2007)



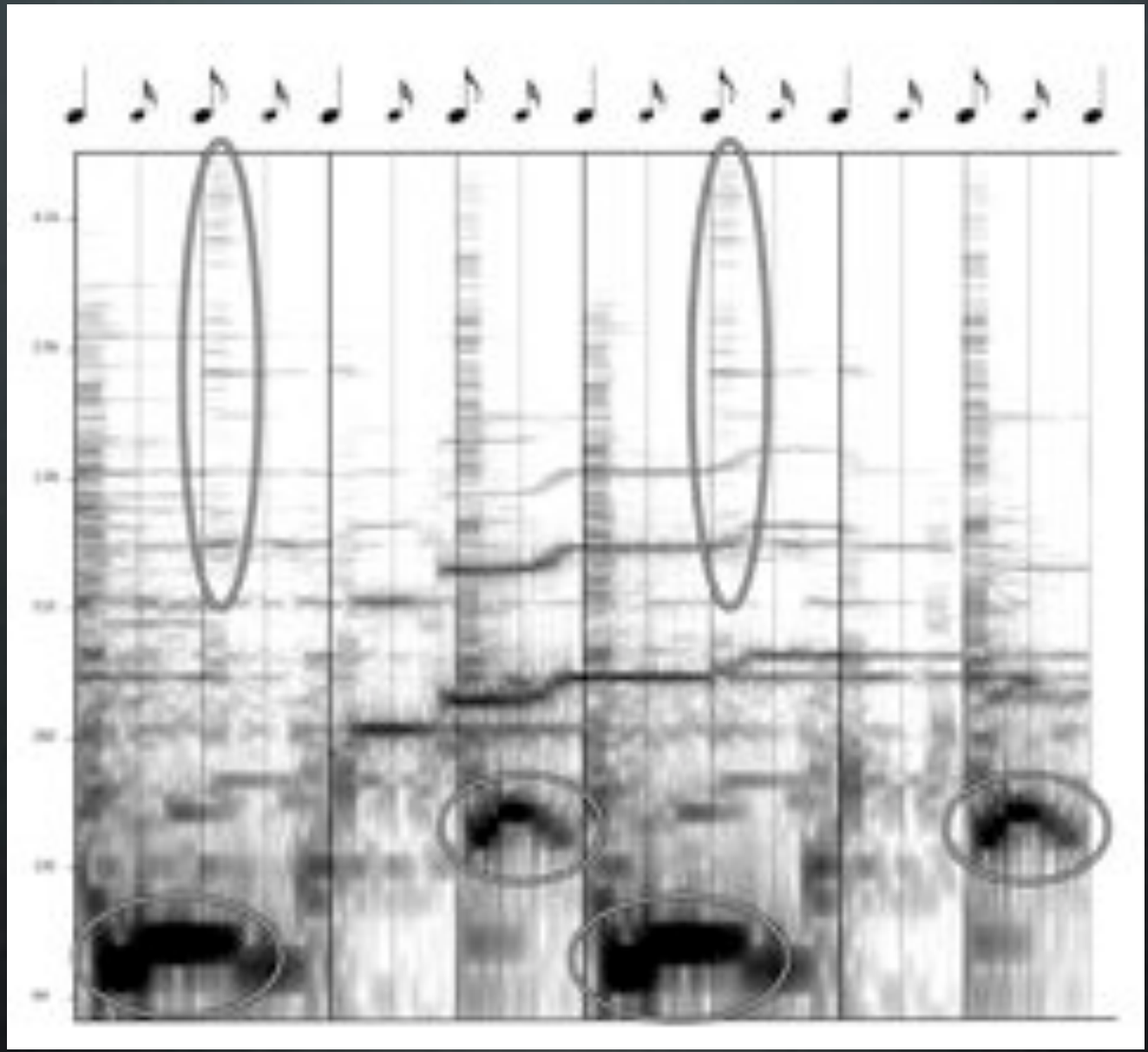
Gotye: «Hearts a Mess» (2007)



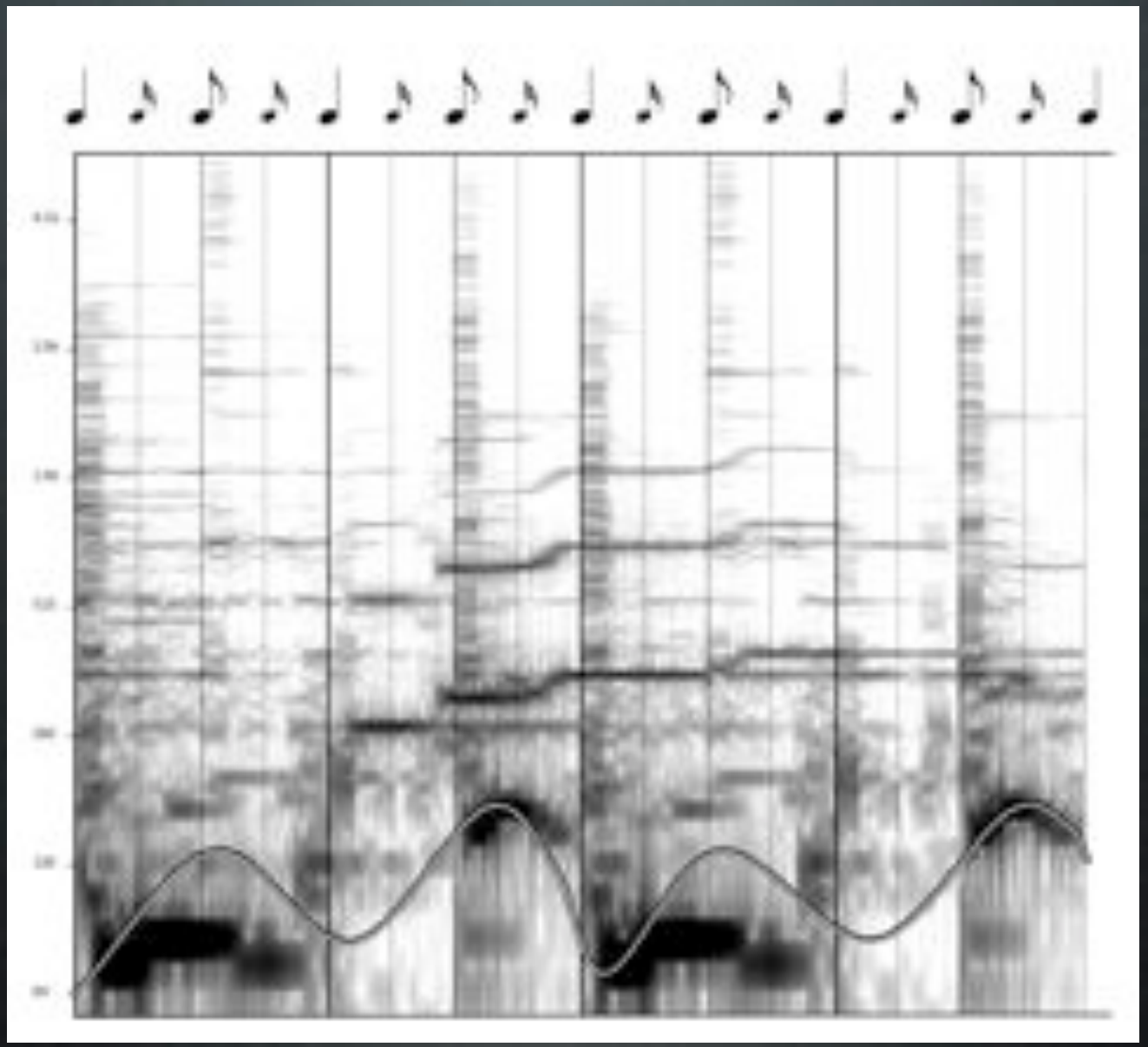
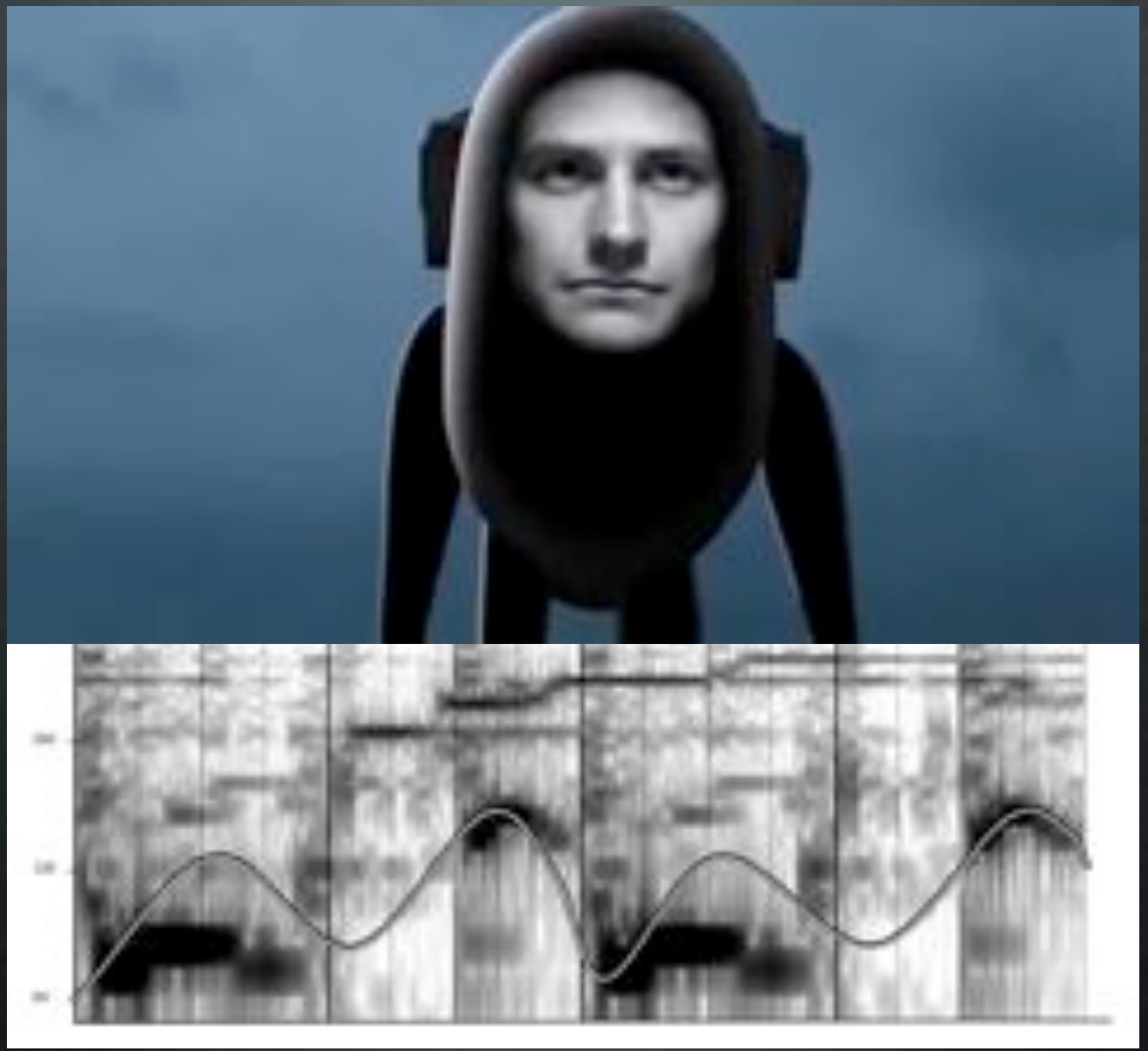




Gotye: «Hearts a Mess» (2007)



Gotye: «Hearts a Mess» (2007)



Gotye: «Hearts a Mess» (2007)