Musikk, rytme og bevegelse

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

"Just in the middle of the first Allegro there was a passage which I felt sure must please. The audience were quite carried away – and there was a tremendous burst of applause. But as I knew, when I wrote it, what effect it would surely produce, I had introduced the passage again at the close – when there were shouts of 'da capo'."

Anderson, Emily, 1966, *The Letters of Mozart and his Family. Chronologically arranged, translated and edited with an Introduction, Notes and Indexes.* (311 Mozart to his Father) P. 558.

The Orchestra of the Eigteenth Century, conducted by Frans Brüggen:

Wolfgang Amadeus Mozart: Symphony No. 31 in D, KV 297 'Paris', I Allegro assai

03:29 - 03:43

"The Andante also found favour, but particularly the last Allegro, because, having observed that all last as well as first Allegros begin here with all the instruments playing together and generally unisono, I began mine with two violins only, piano for the first eight bars – followed instantly by a forte; the audience, as I expected, said 'hush' at the soft beginning, and when they heard the forte, began at once to clap their hands."

Anderson, Emily, 1966, *The Letters of Mozart and his Family. Chronologically arranged, translated and edited with an Introduction, Notes and Indexes.* (311 Mozart to his Father) P. 558.

The Orchestra of the Eigteenth Century, conducted by Frans Brüggen:

Wolfgang Amadeus Mozart: Symphony No. 31 in D, KV 297 'Paris', III Allegro

0:00 - 0:27

David Sylvian: «Orpheus» 1986

Ke$ha: Tic Toc

Thomas Eriksen

Lars Vaular

FRA TOPP 20, RÅDHUSPLASSEN, 2010

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)

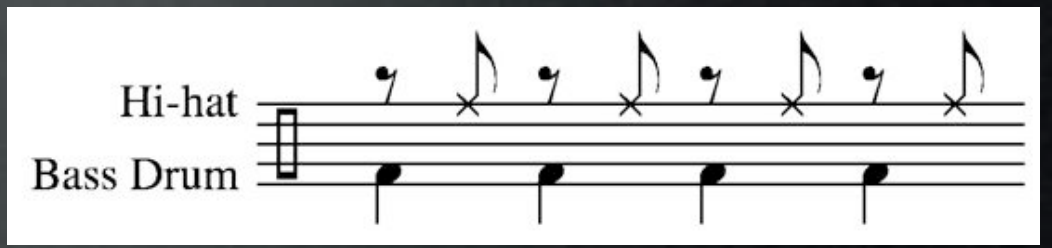
Donna Summer:
I Feel Love (1977)

Dan Hartman:
Instant Replay (1978)

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

Gloria Gaynor:
I Will Survive (1979)

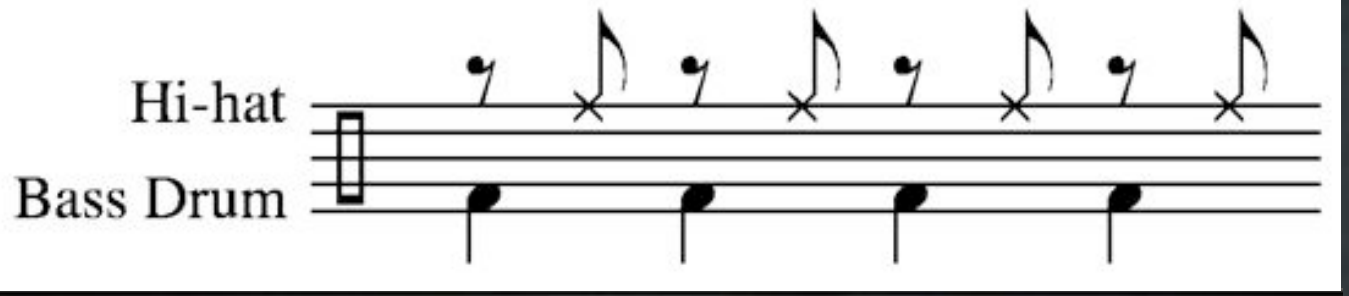
Abba:
Gimme! Gimme! Gimme! (A Man after Midnight) (1979)

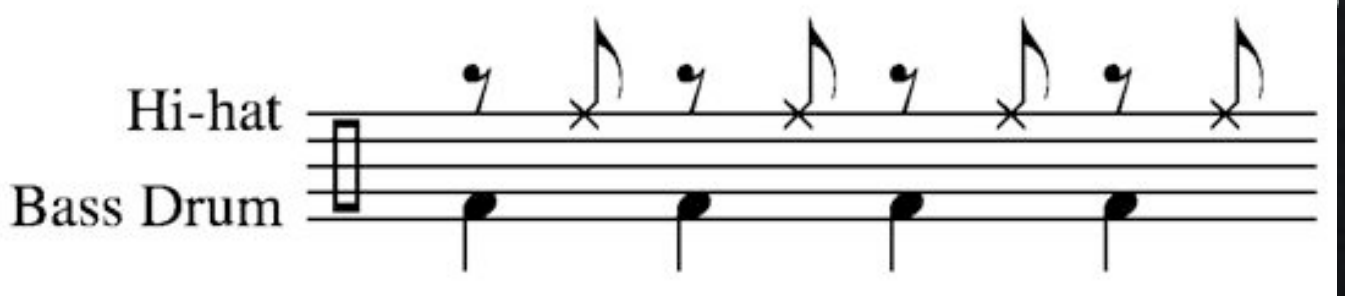


Leftfield: "Open Up" (1995)

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

Basement Jaxx: "Red Alert" (1999)



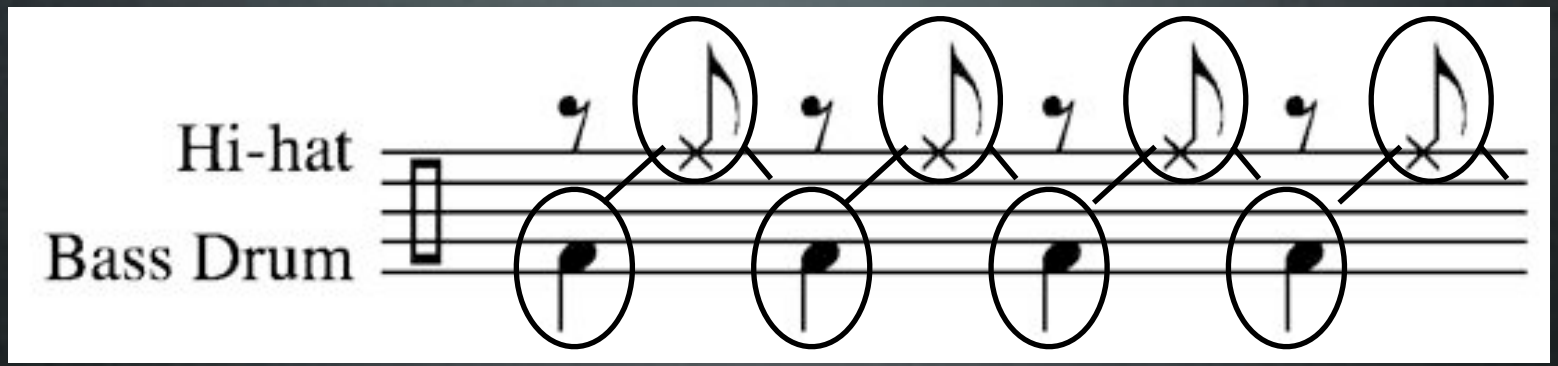


Chemical Brothers: "Star Guitar" (2002)

Daft Punk : "Around the World" (1996)

Röyksopp: "Poor Leno" (2001)

(c) www.PerfectPhoto.CA


Hi-hat
Bass Drum

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

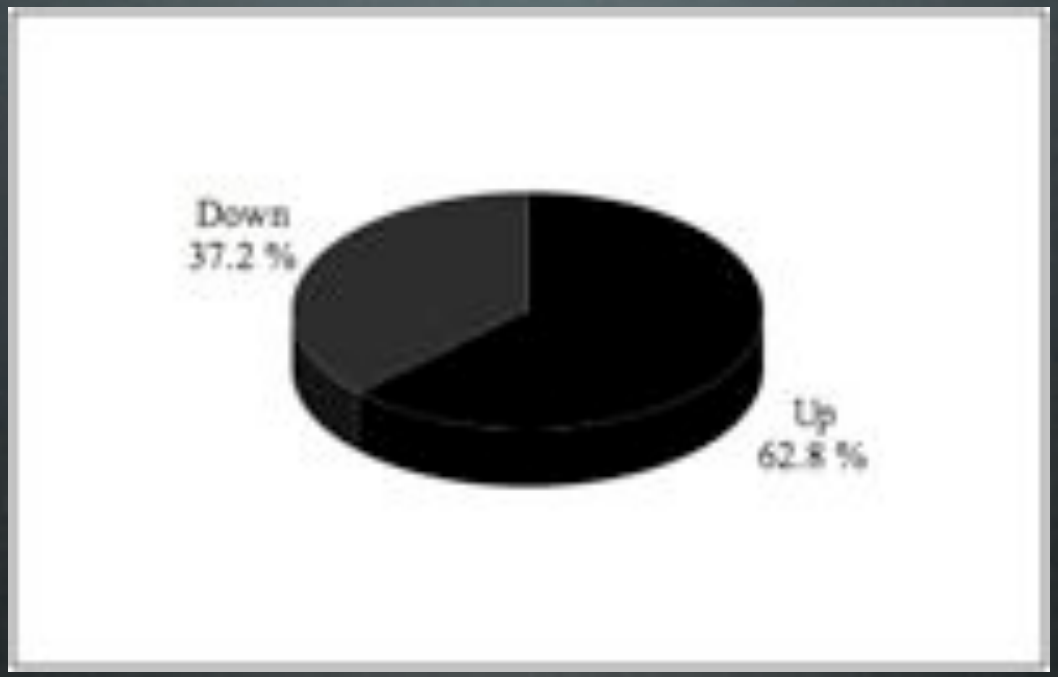
6. Chemical Brothers: "Star Guitar" (2002)

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

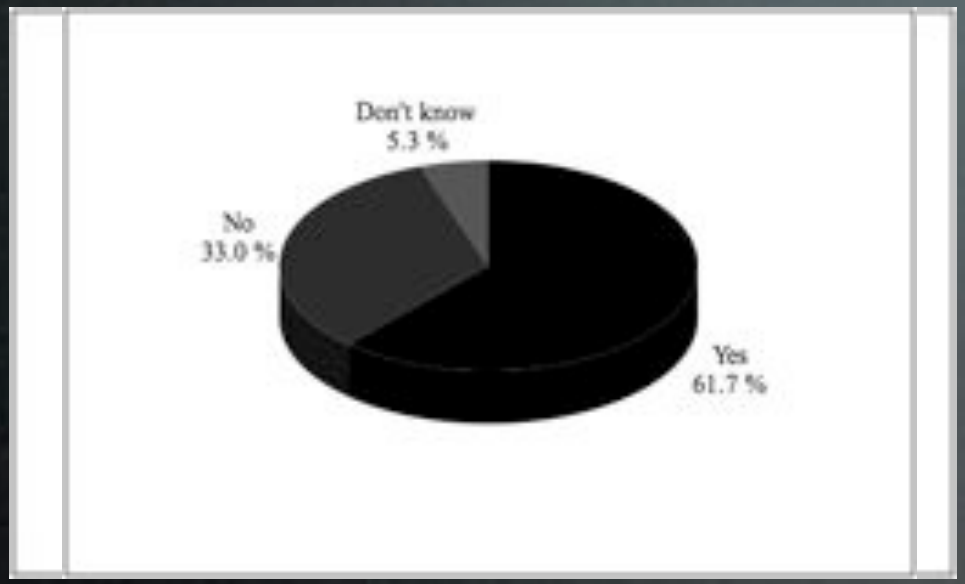
6.2. Oppleves bevegelsen annerledes etter at hi-hat kommer inn? *
- Ja
- Nei
- Vet ikke

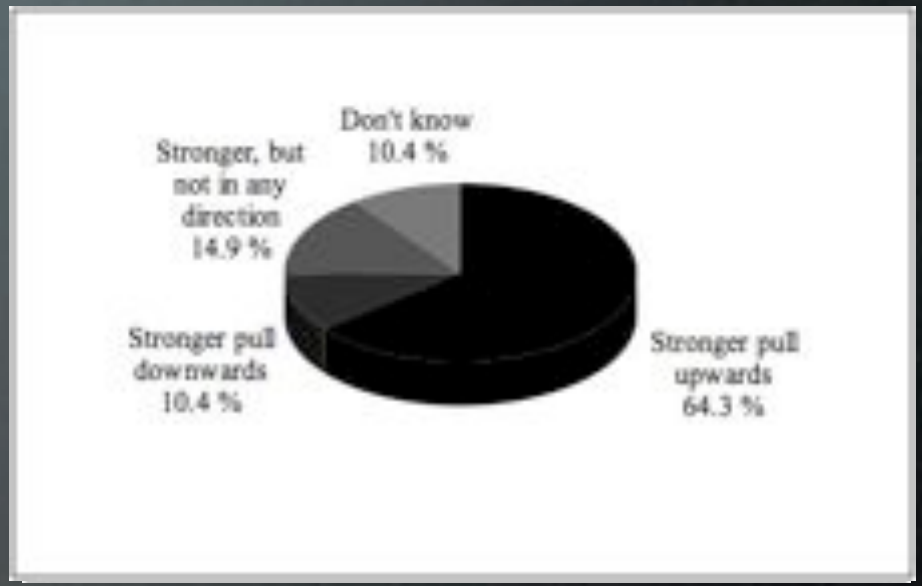
6.3. Hvis ja, hvordan oppleves endringen?
- Sterkere dragning oppover

Chuck Berry: “Maybellene” (1955)

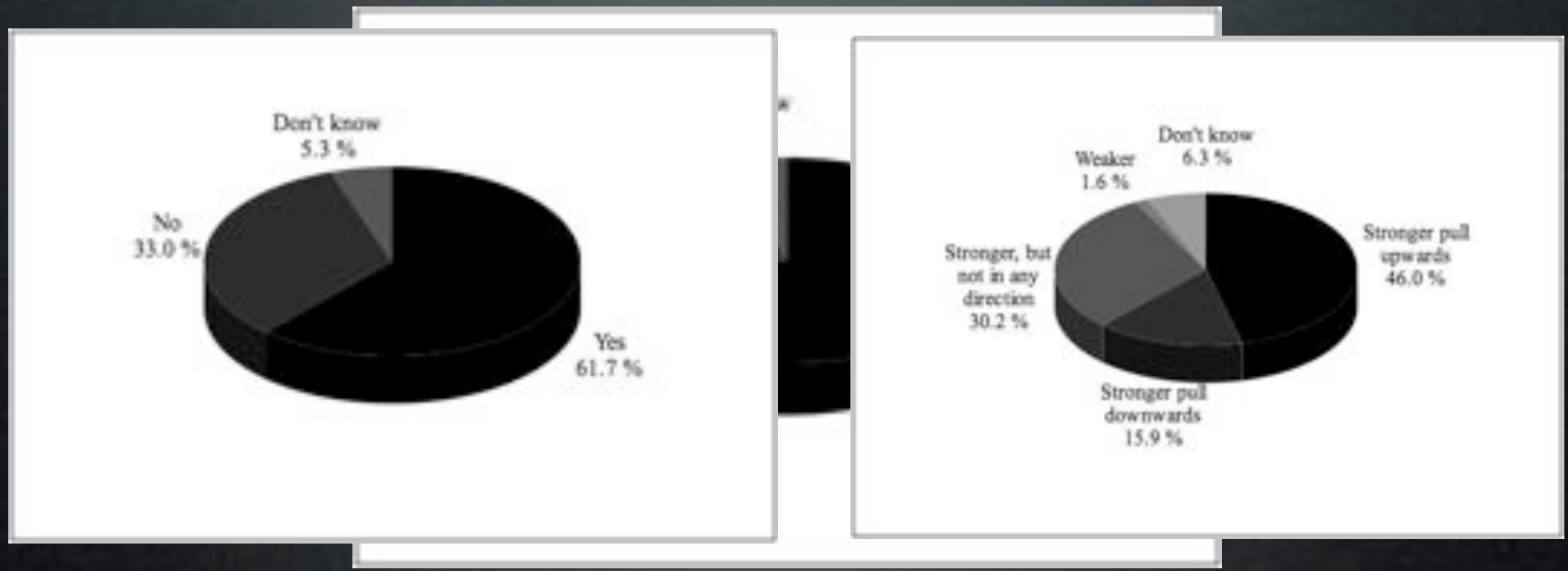


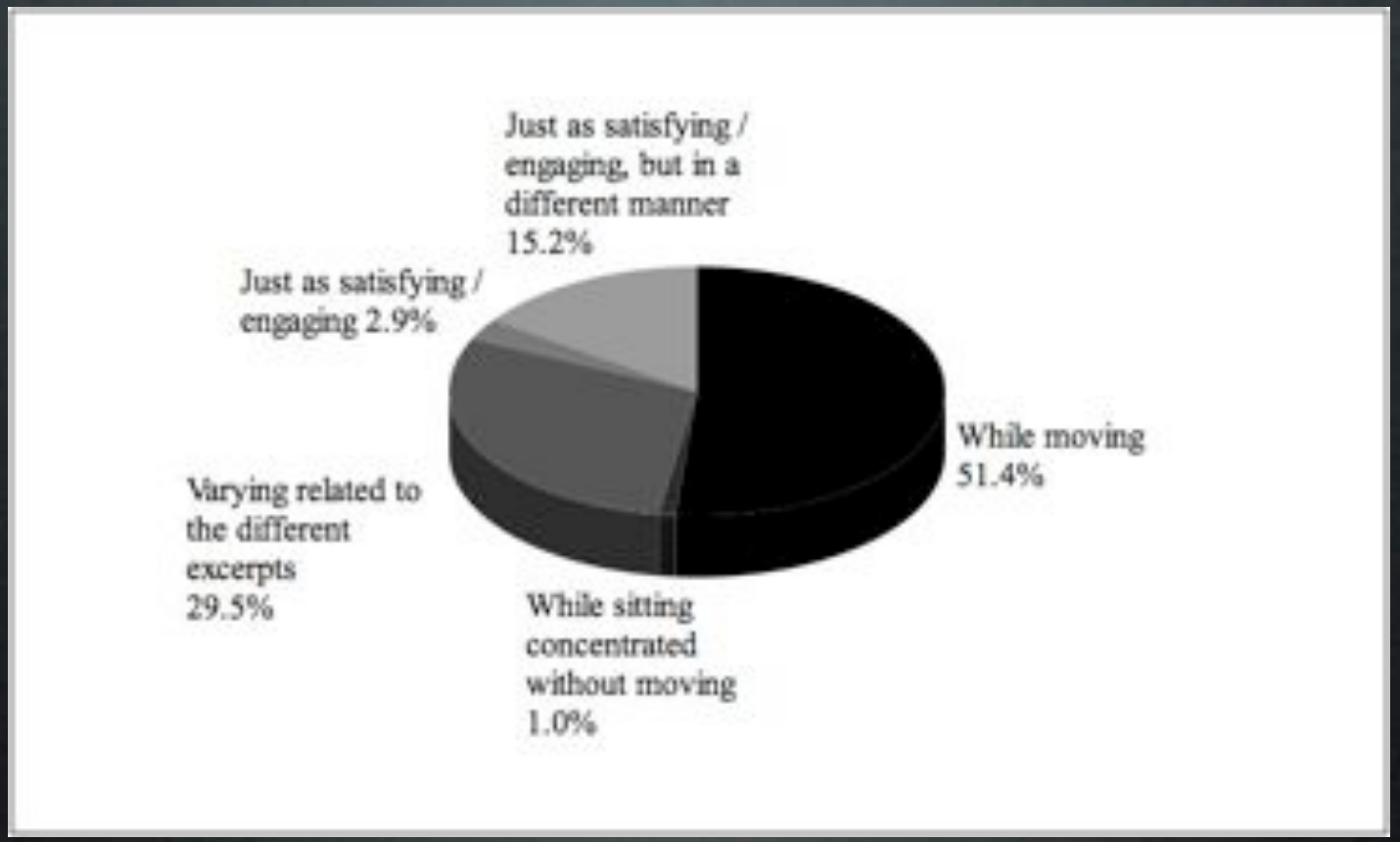
Daft Punk: “Phœnix” (1996)





Chemical Brothers: “Star Guitar” (2002)



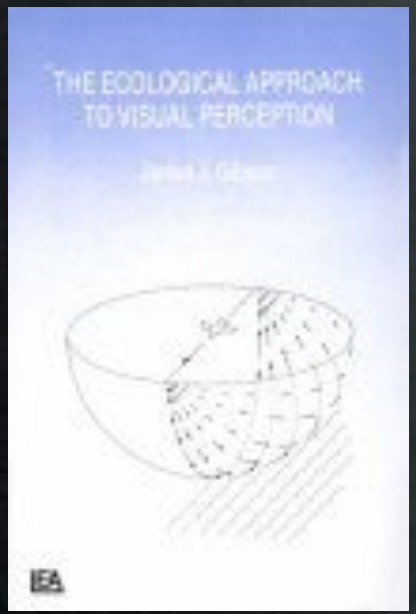

Just as satisfying / engaging, but in a different manner 15.2%
Just as satisfying / engaging 2.9%
While moving 51.4%
Varying related to the different excerpts 29.5%
While sitting concentrated without moving 1.0%

Økologi-orientert persepsjonsteori

James J. Gibson (1904-1979)

* Affordance

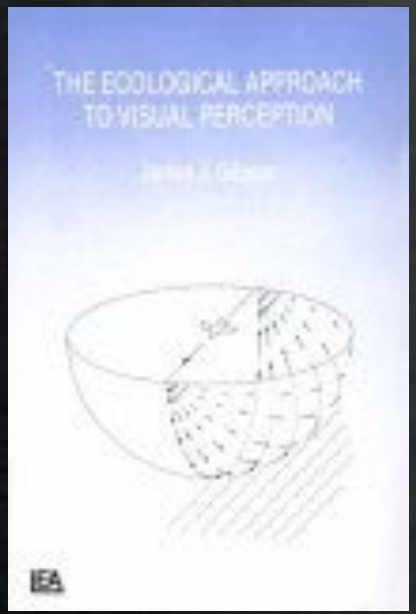
* Persepsjon - aksjon

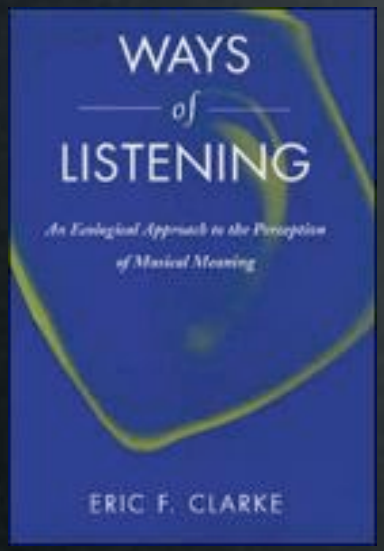


Økologi-orientert persepsjonsteori

"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)

Entrainment

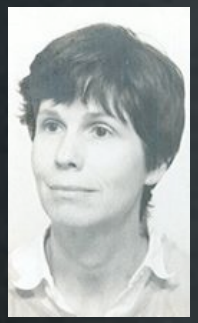
Entrainment

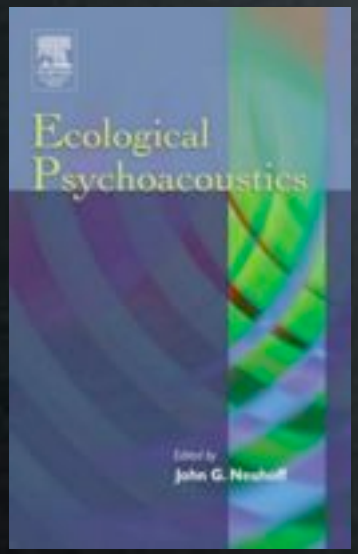
Christian Huygens (1629-1695)

Entrainment

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

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





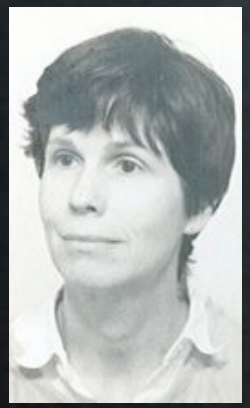
Mari Riess Jones

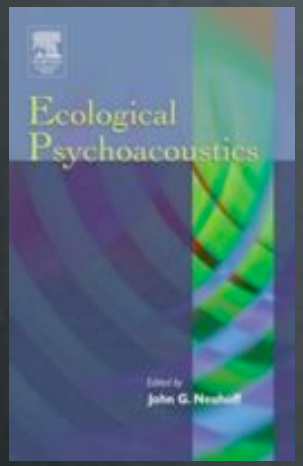
Rhythmic organisms interact, more or less effectively, with dynamic flow patterns of events via *entrainment*: An event's driving rhythm shapes an organism's driven rhythm through adaptations of period and phase. This entrainment process extends to rhythms that reflect the ebb and flow of attending energy.

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?



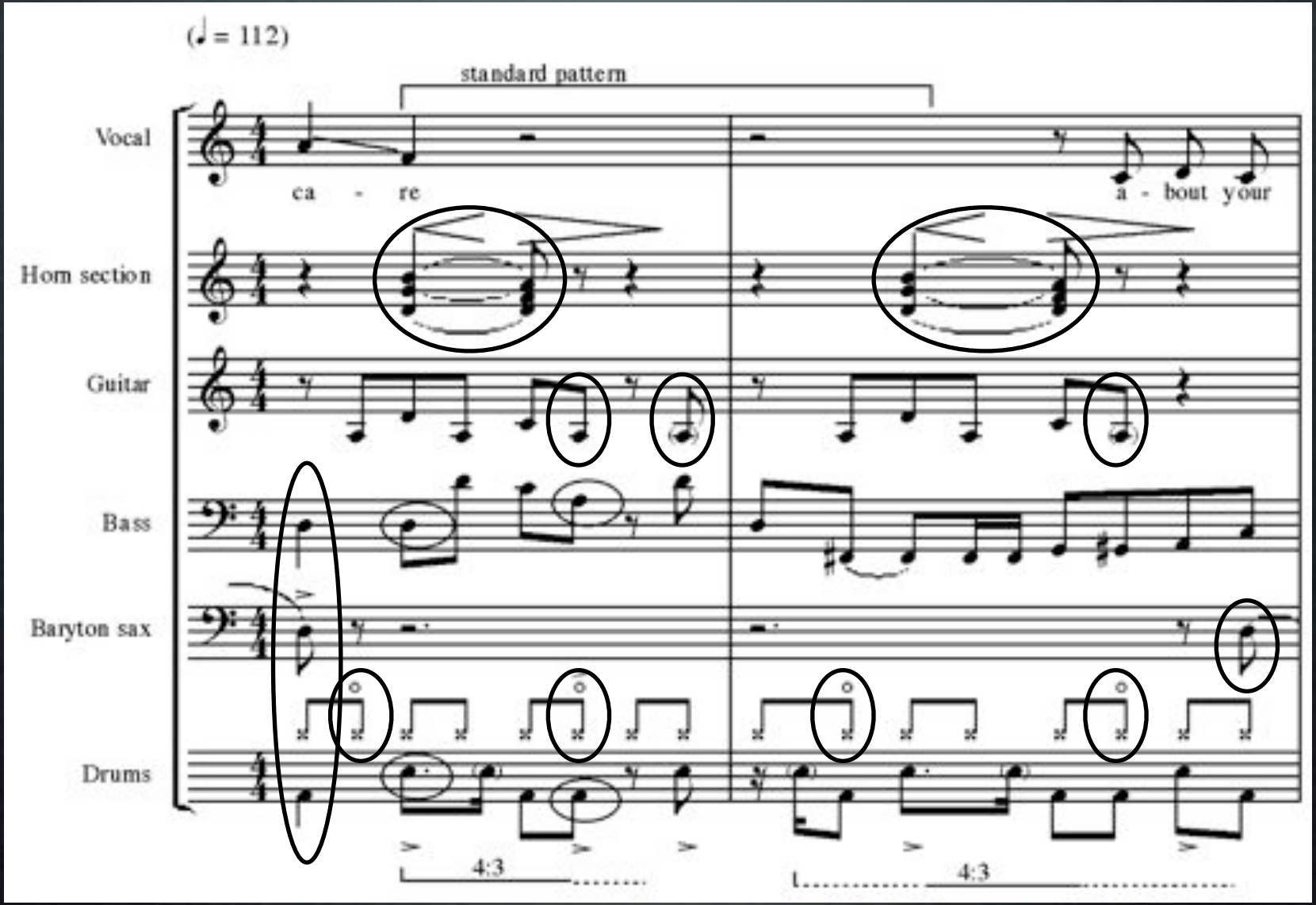


Mari Riess Jones:
“Attention and Timing “

* Oppmerksomhet
* Forventning

Hvilke lyder i musikken er vesentlige?

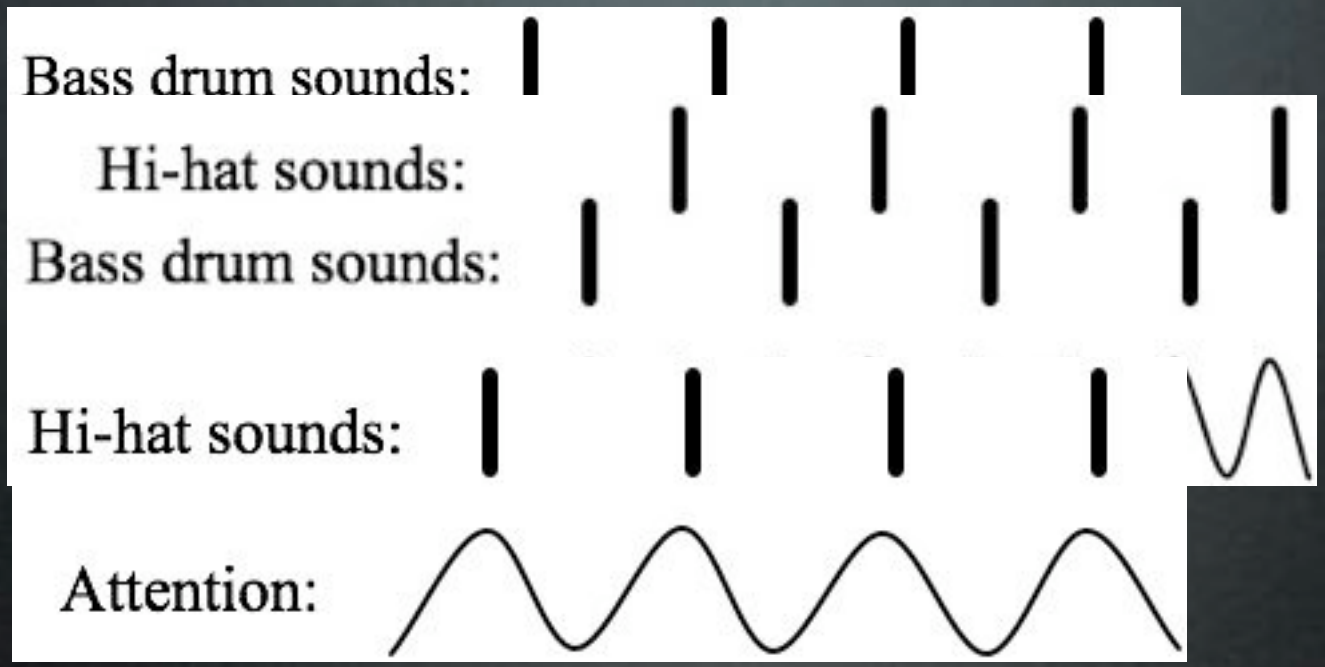
*Gjentagende lyder, toner, aksentueringer, etc. danner forventninger og former vår oppmerksomhet.

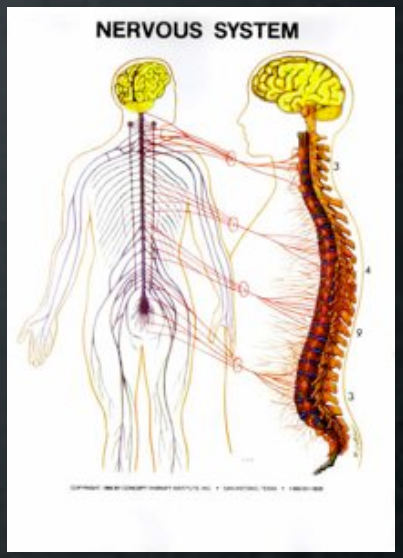


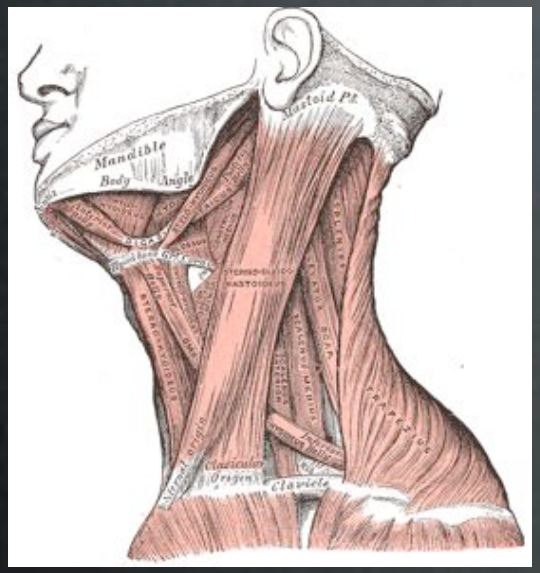
Groove from James Brown: Cold Sweat (1967) - tempo 112 bpm

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

Oppmerksomhetspunkter:



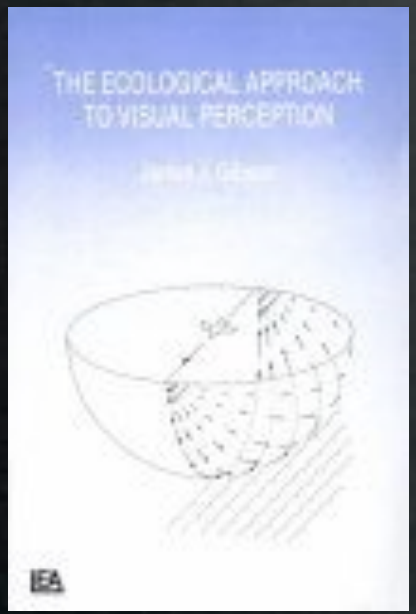

NERVOUS SYSTEM


Mastoid Pt.
Mandible
Body
Angle
Origin
Clavicle

Persepsjon relatert til økologi

James J. Gibson (1904-1979)

* Perseptuell læring



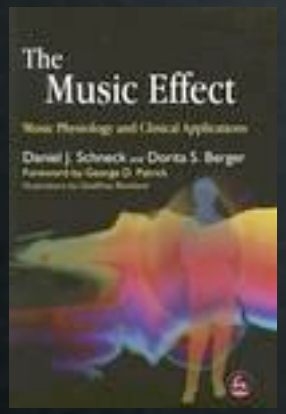
Sandor 7 mnd. + Stevie Wonder: “Superstition”

Lydproduserende bevegelser

Imitasjon

Entrainment -> bevegelser?

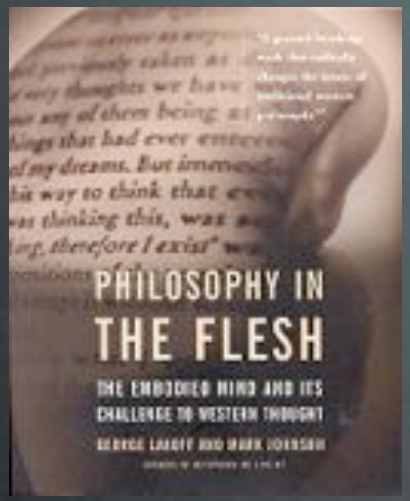
Bevegelse skjer ved at nervesignaler gir beskjed til muskelen om å trekke seg sammen.



"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."

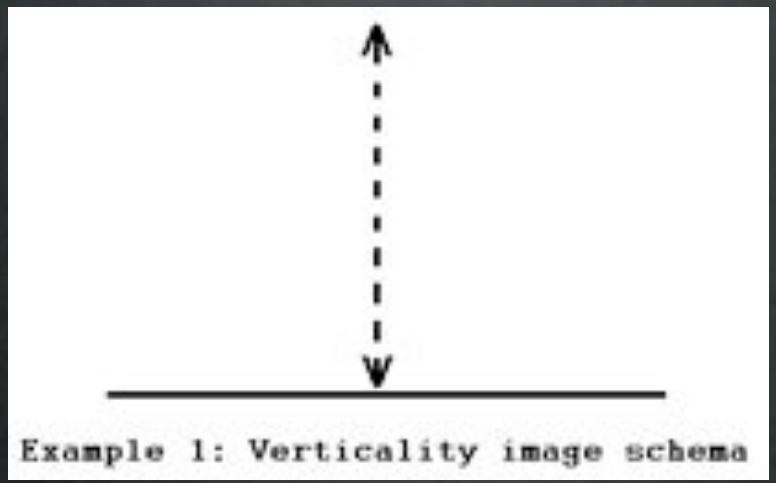
Daniel J. Schneck & Dorita S. Berger. 2006, *The Music Effect: Music Psychology and Clinical Application*. Jessica Kingsley Publisher. S. 139.

Vertikalitet



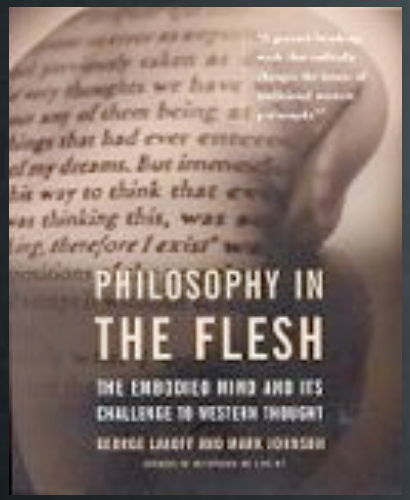
George Lakoff

Mark Johnson



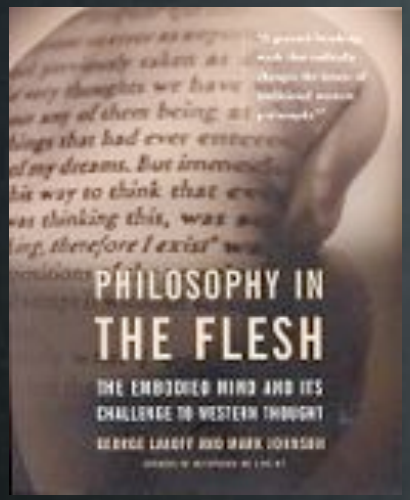
Verticality is not inherent in music (let alone in its notational representation); it is not *there* to be observed (heard) in the music, but it is instead a product of logical, metaphoric conceptualization.

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.

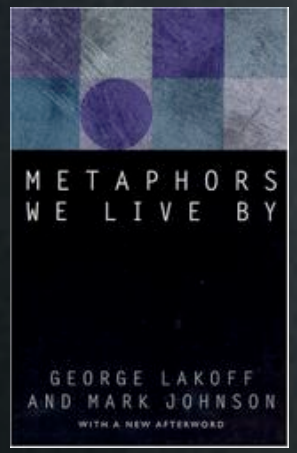


For young children, subjective (nonsensorimotor) experiences and judgments, on the one hand, and sensorimotor experiences, on the other, are so regularly conflated – undifferentiated in experience – that for a time children do not distinguish between the two when they occur together.

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.

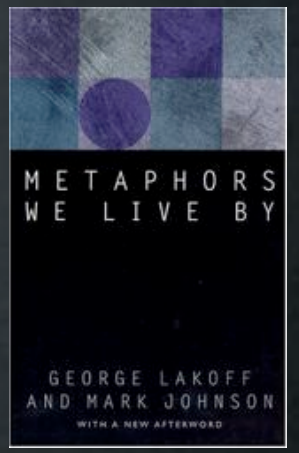
Mål: Omsorg/hengivenhet
“Han er en nær person”
“Han er en varm person”



"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.

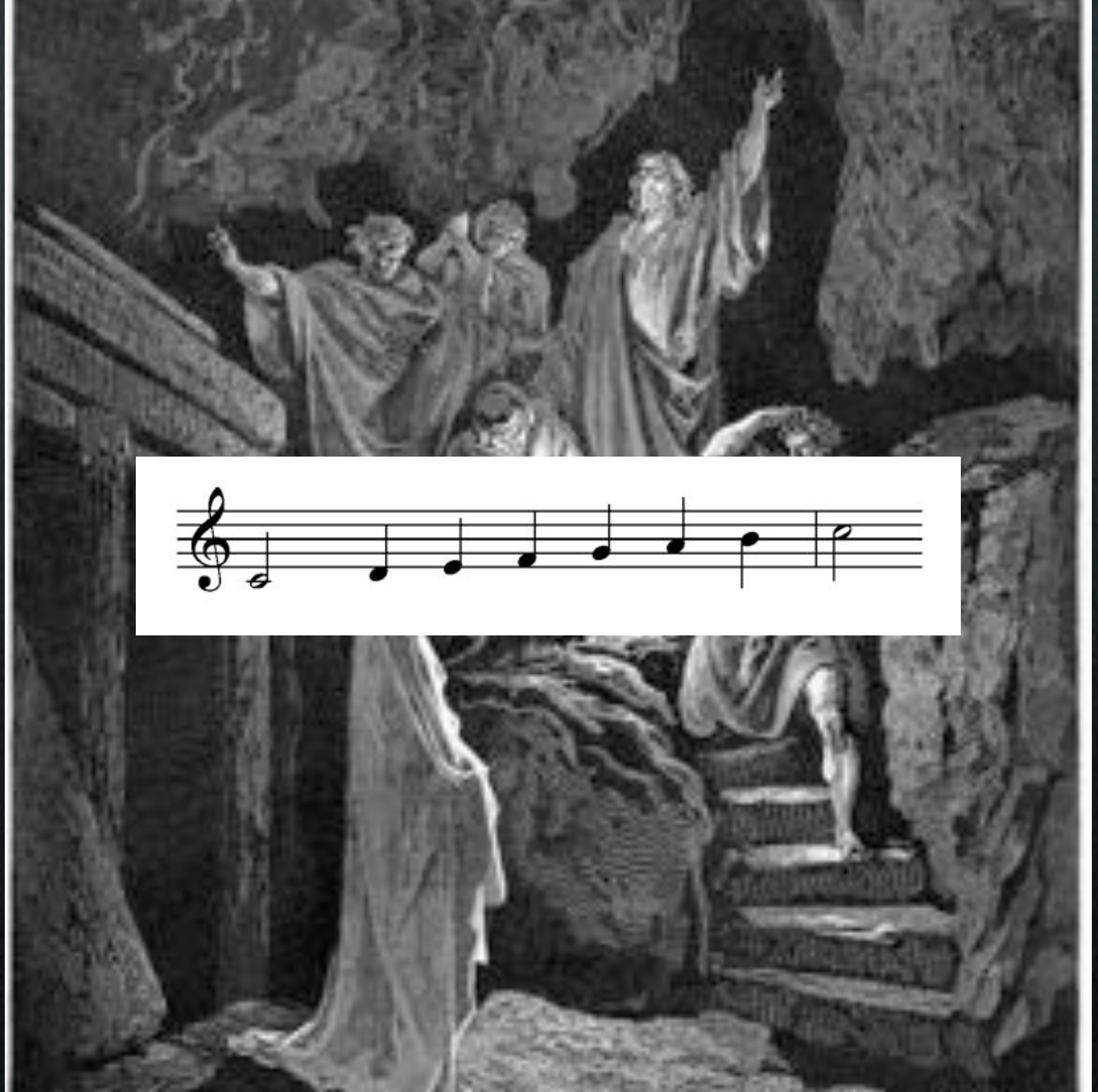
UP

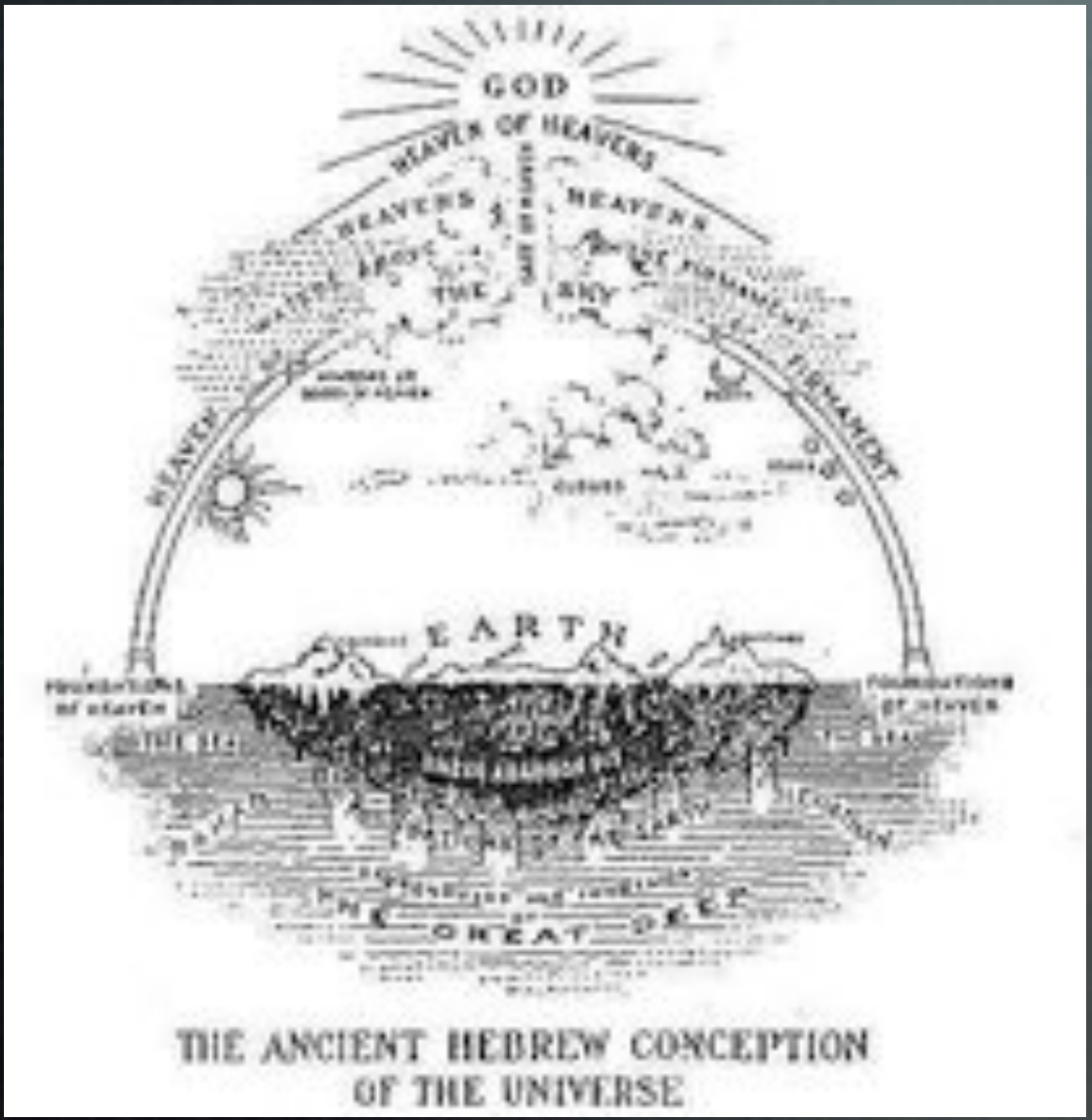


“He’s the leader”

“He’s in the social hierarchy”

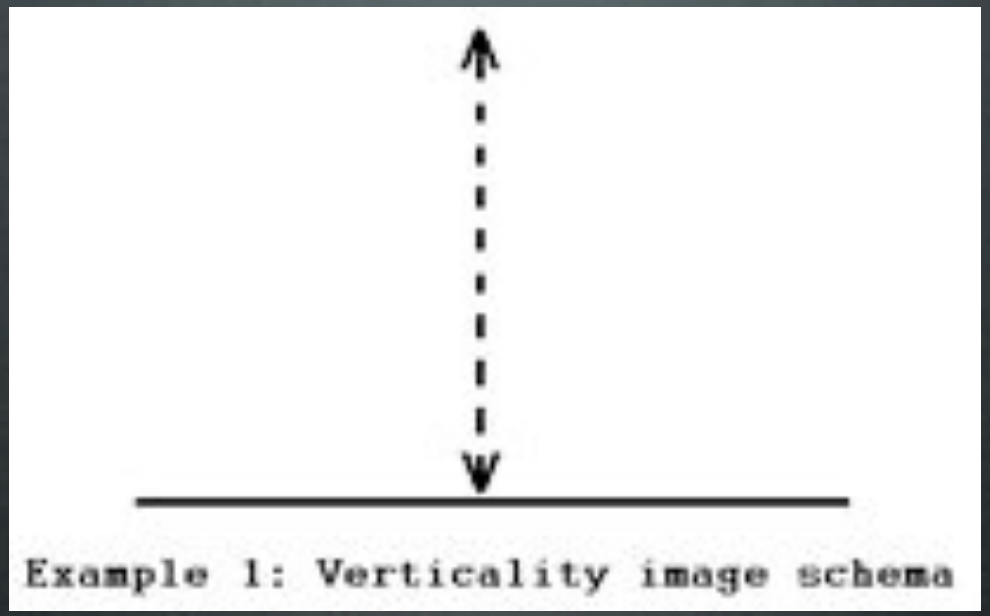
DOWN





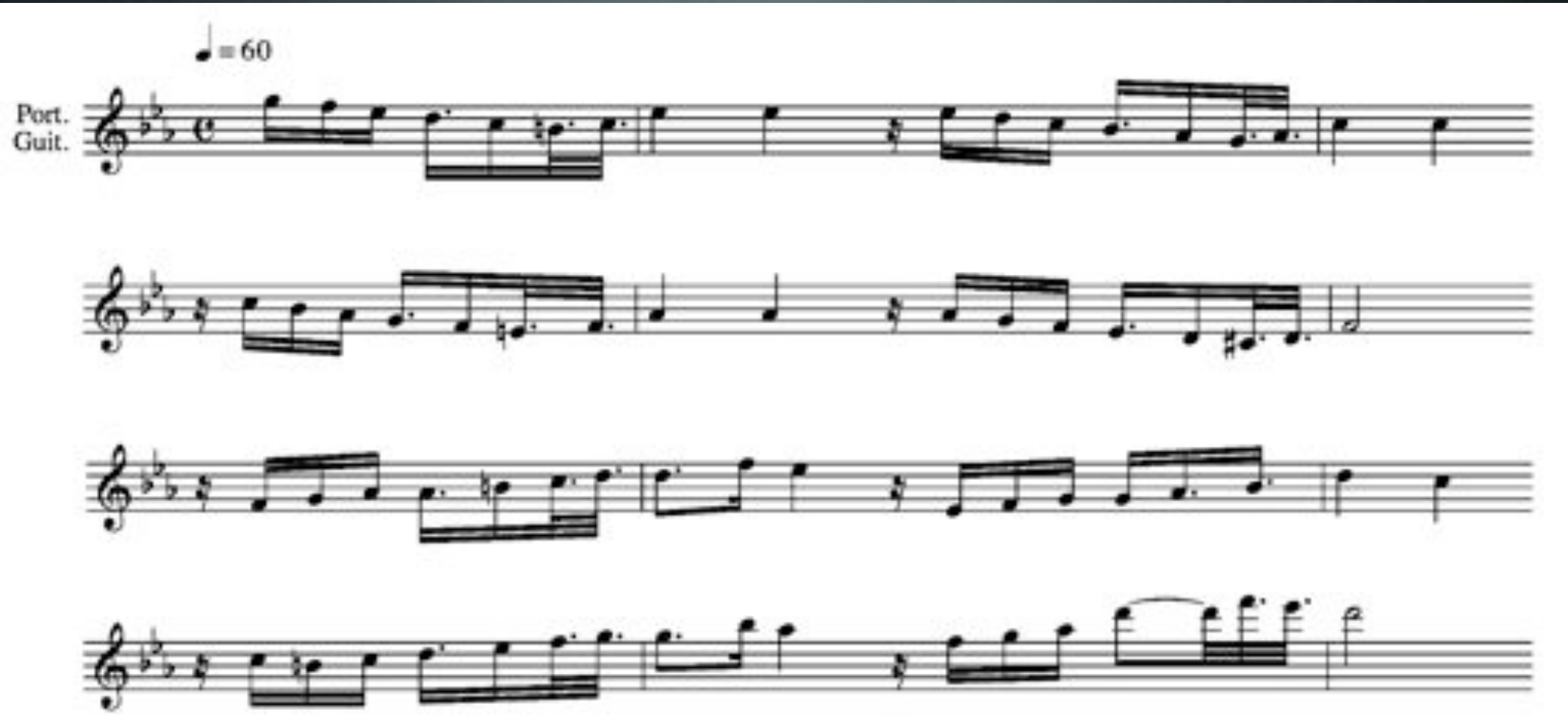
THE ANCIENT HEBREW CONCEPTION
OF THE UNIVERSE

PITCH RELATIONSHIPS ARE RELATIONSHIPS IN VERTICAL SPACE



Example 1: Verticality image schema

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


♩ = 60
Port.
Guit.

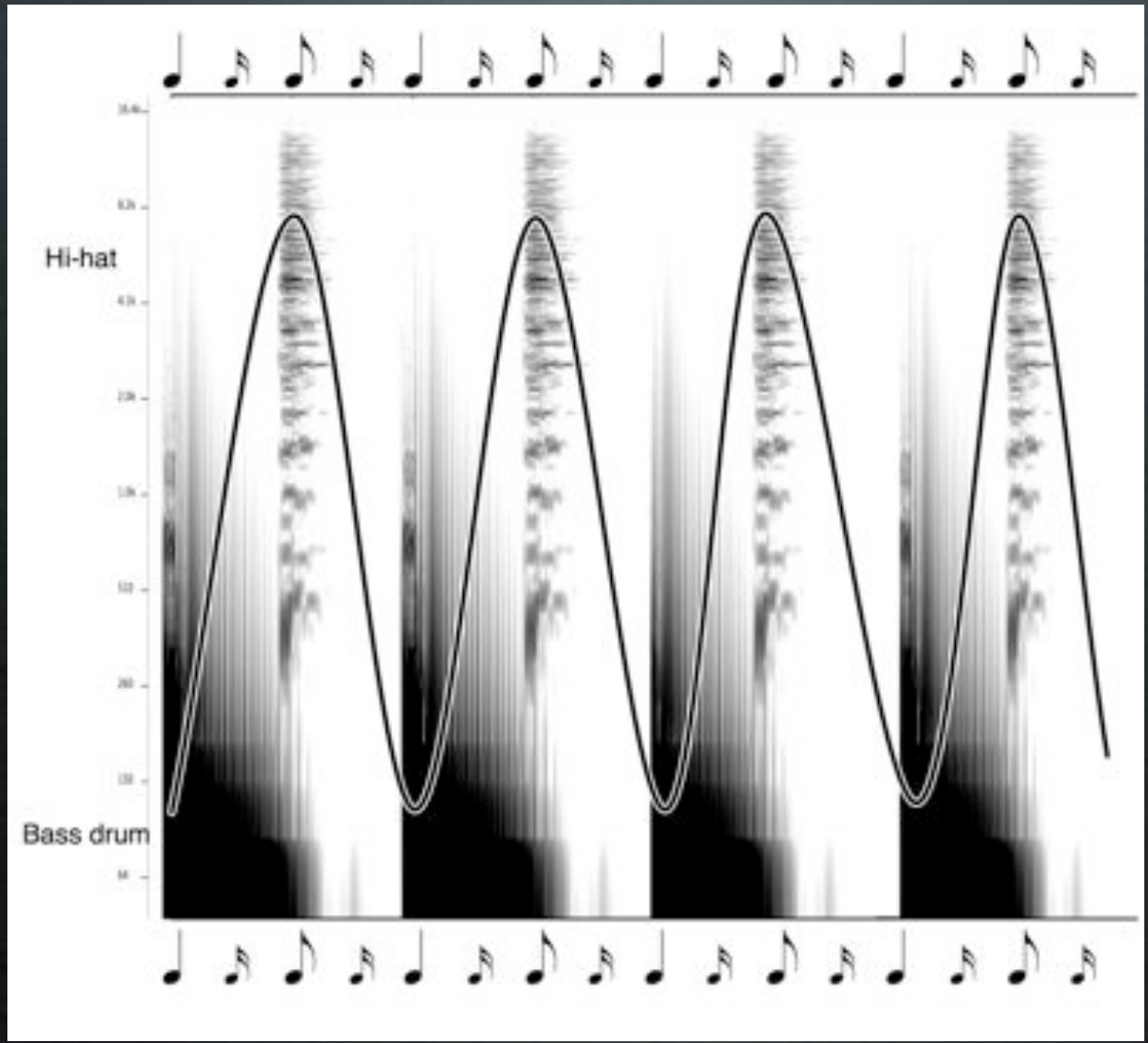
Analyse av musikk basert på
teorier om musikk og bevegelse.

Kap. 6: Rytme

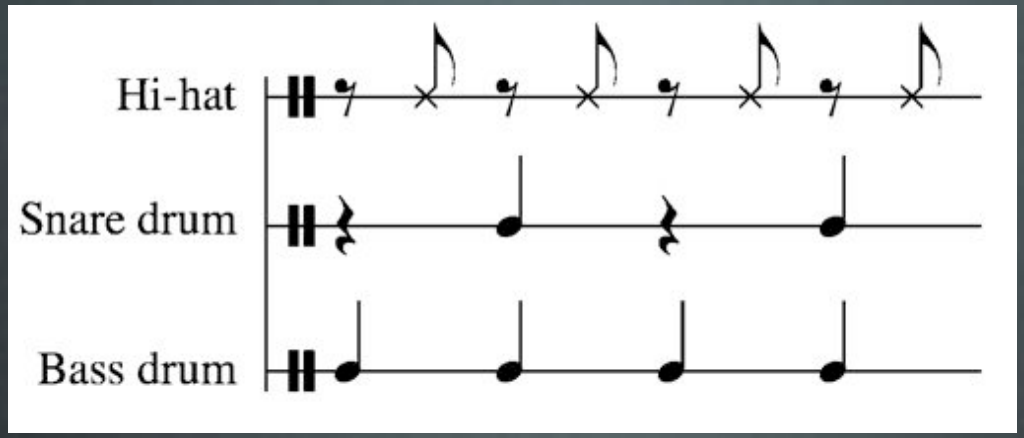
Kap. 8: Sound/lyd

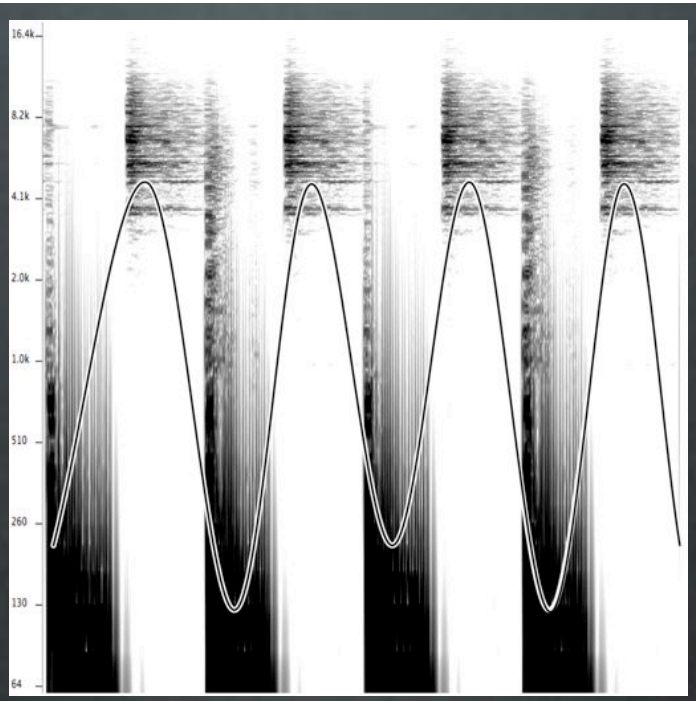
Entrainment - Vertikalitet

Oppmerksomhetspunkter:

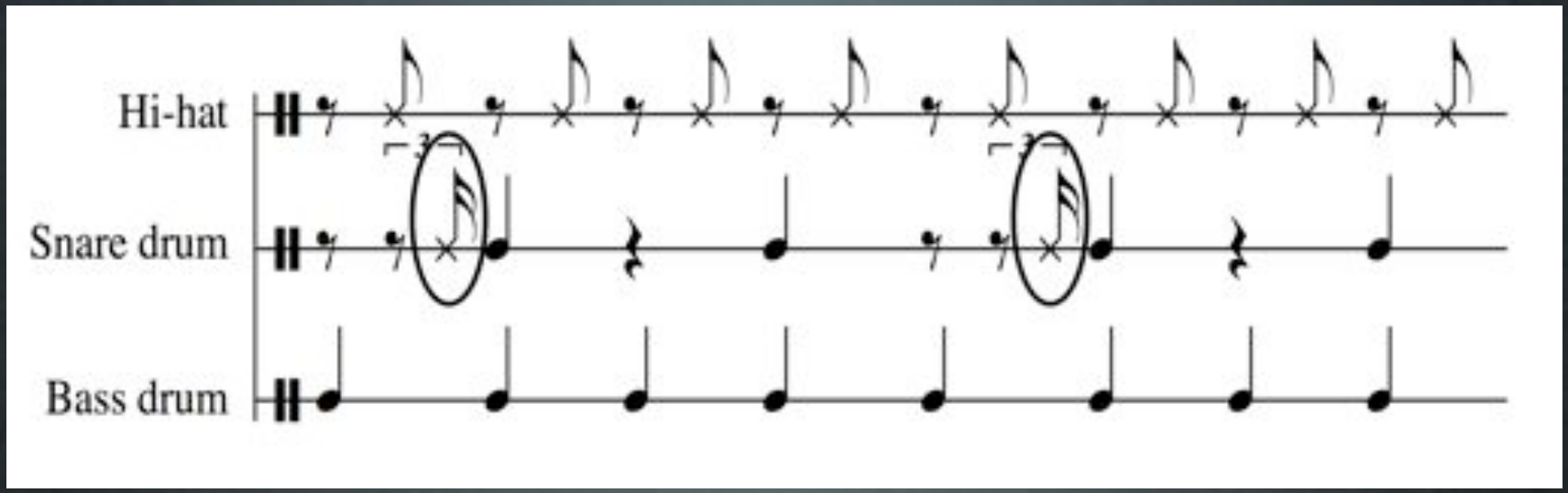


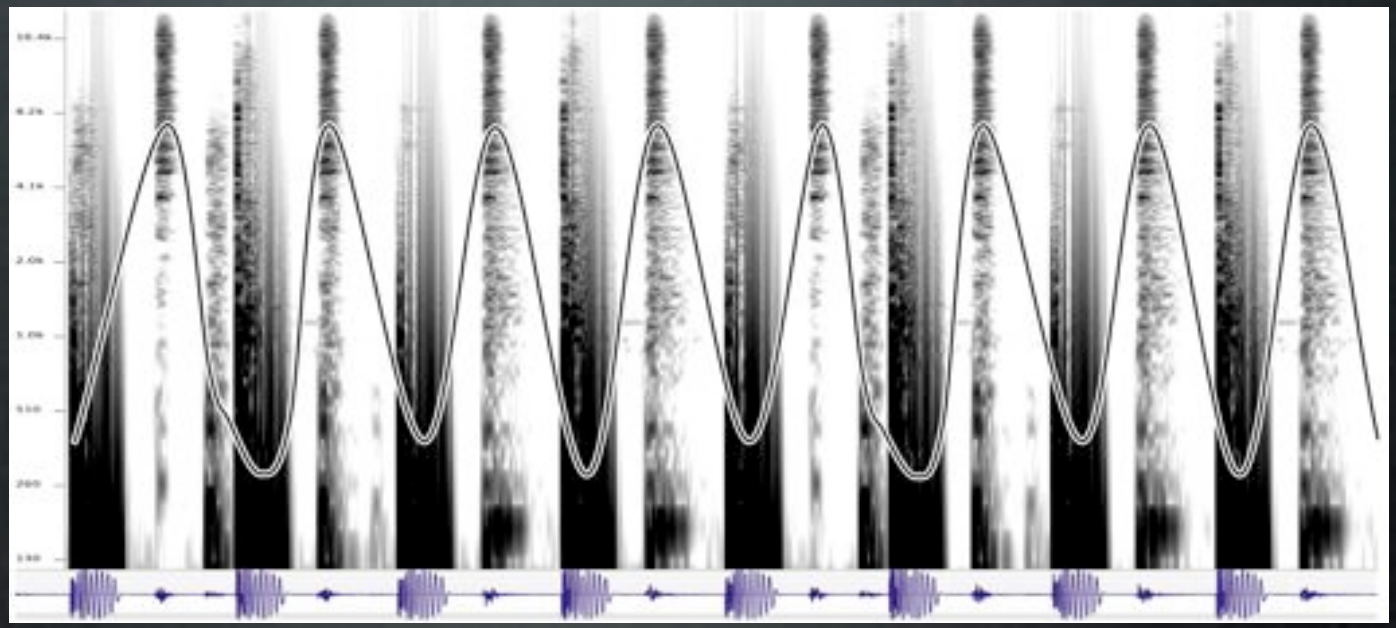
Variasjon





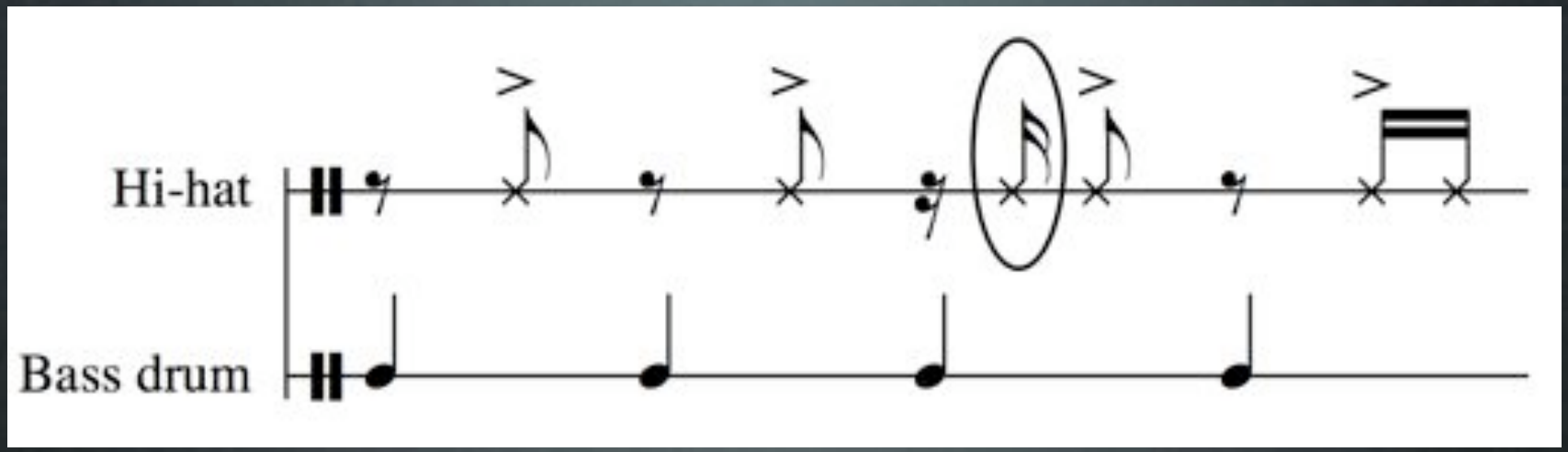
Deep Dish feat. Everything but the Girl: “The Future of the Future (Stay Gold)” (1998)

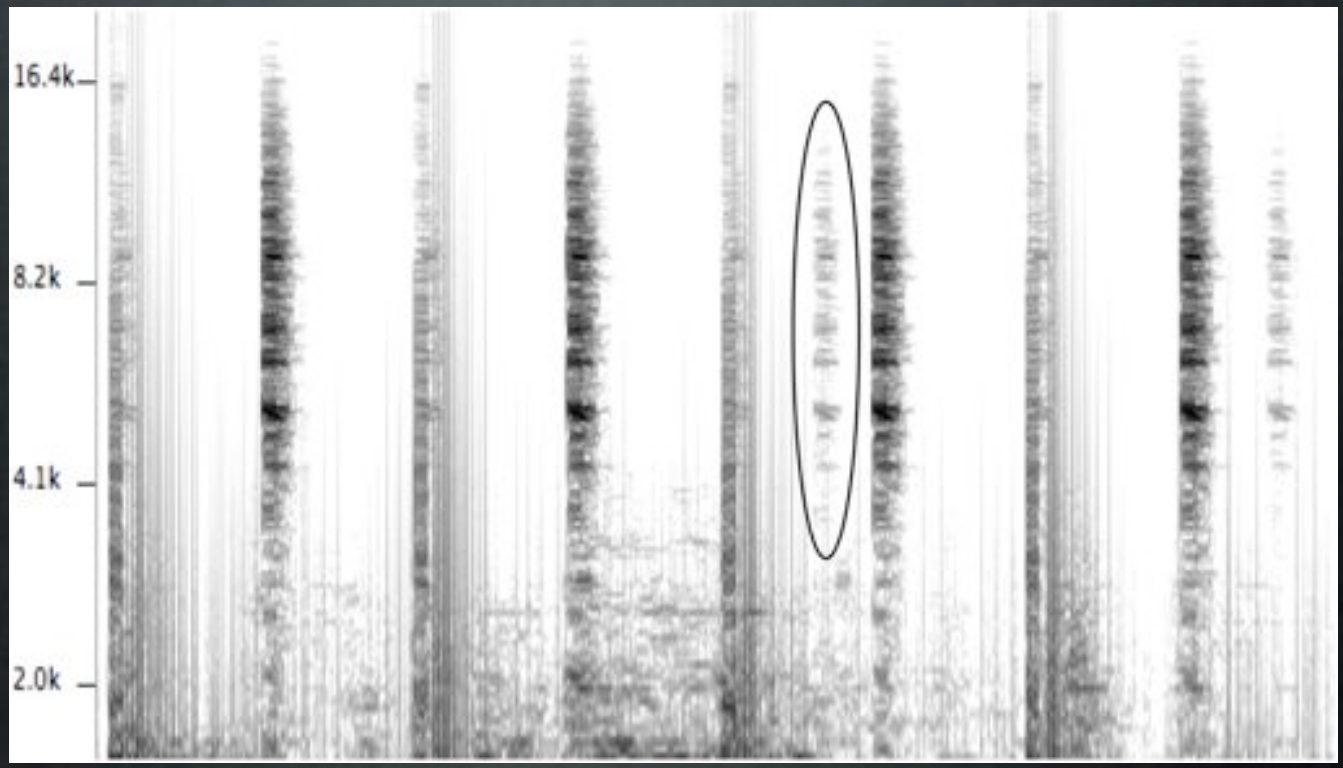




Shazz: “Fallin’ In Love” (PT. G Remix) (2001)

Bpm: 127





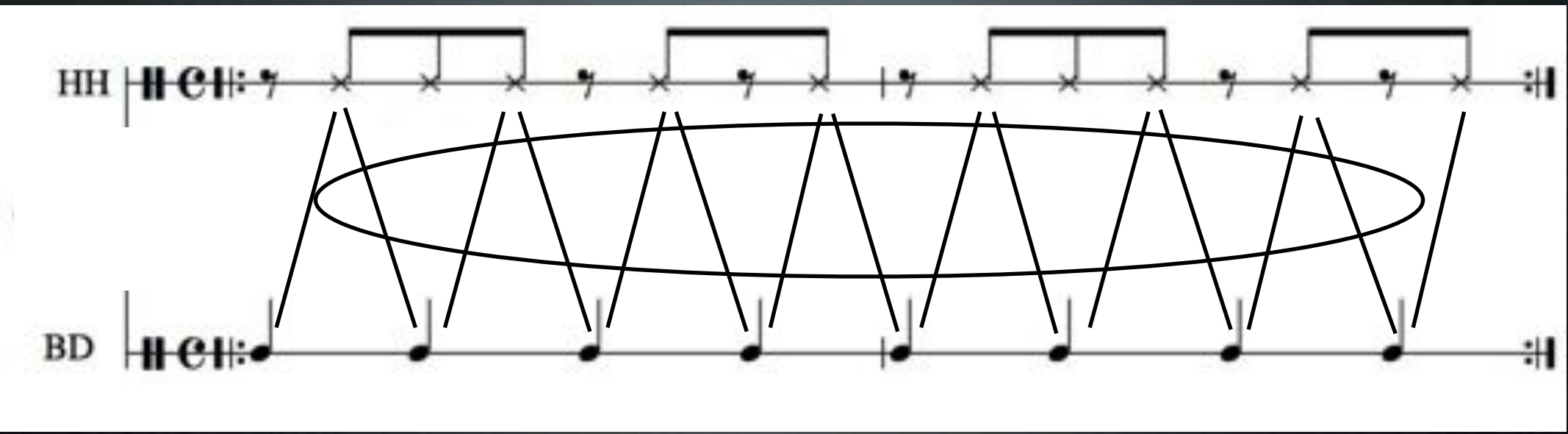
Boogie Drama: “Hypnofunk” (2002)

Bpm: 125

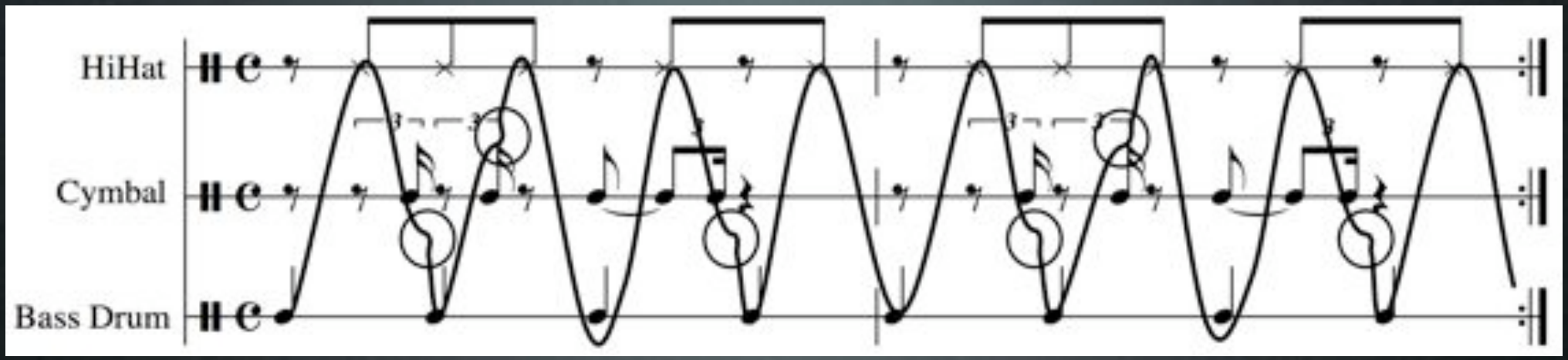
Utfyllende temaer / Spenningspunkter:

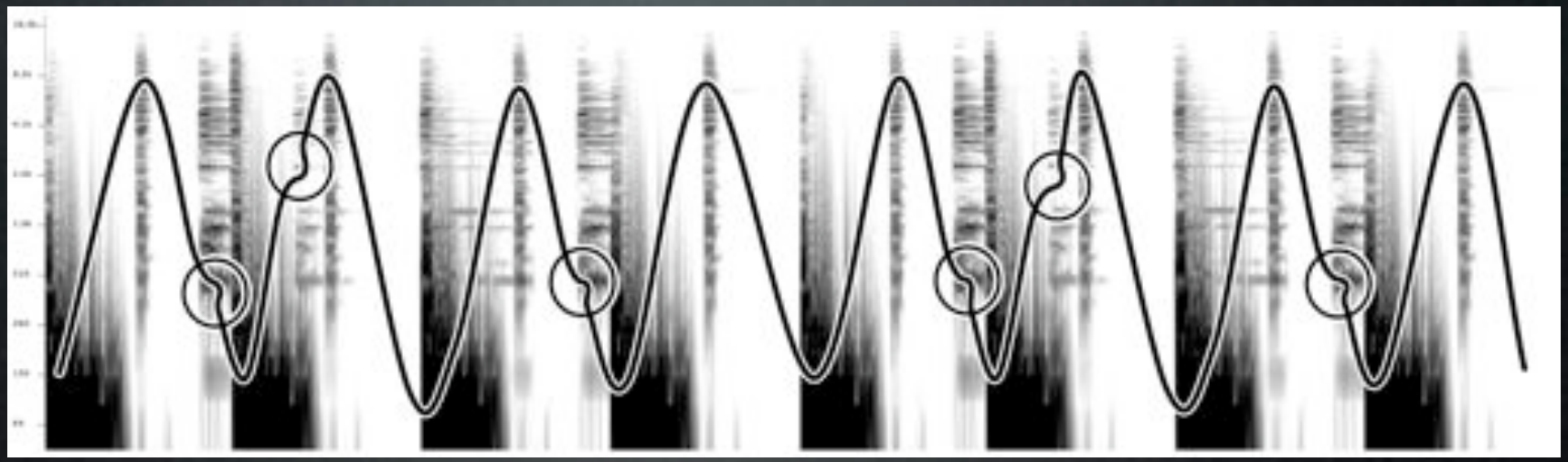
Basement Jaxx: “Jump’N’Shout”, 1999

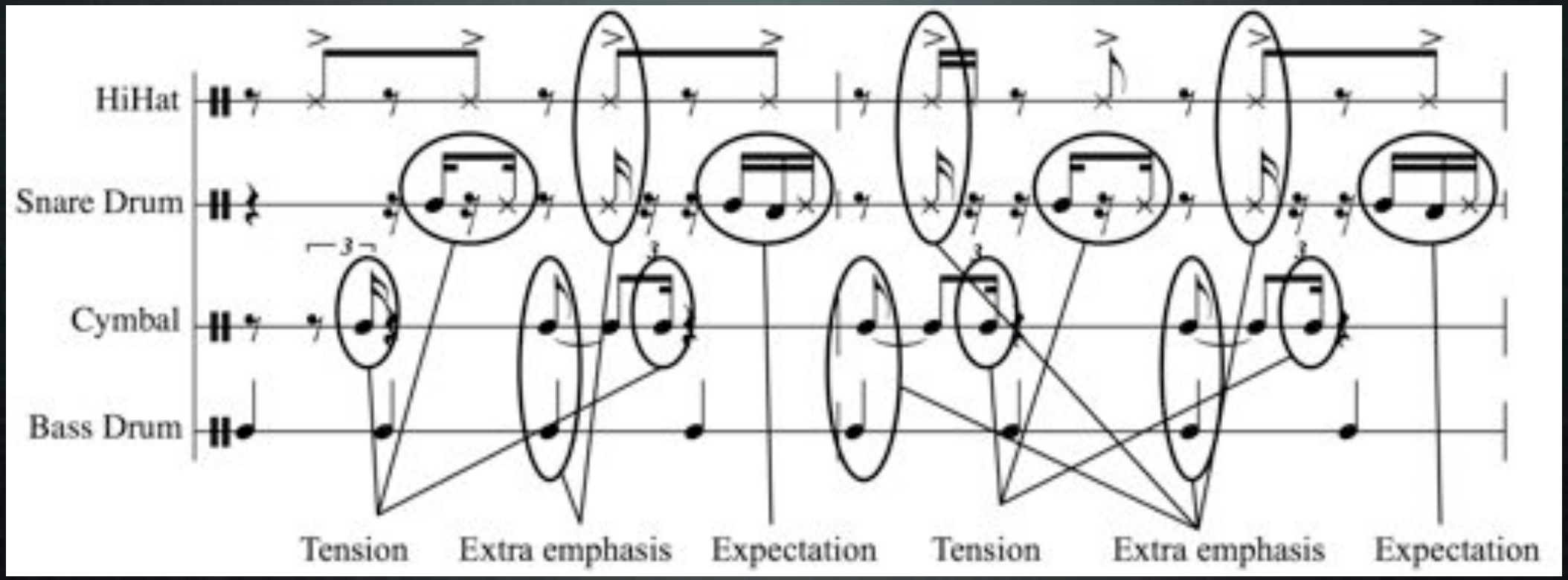
Takt 1-4:

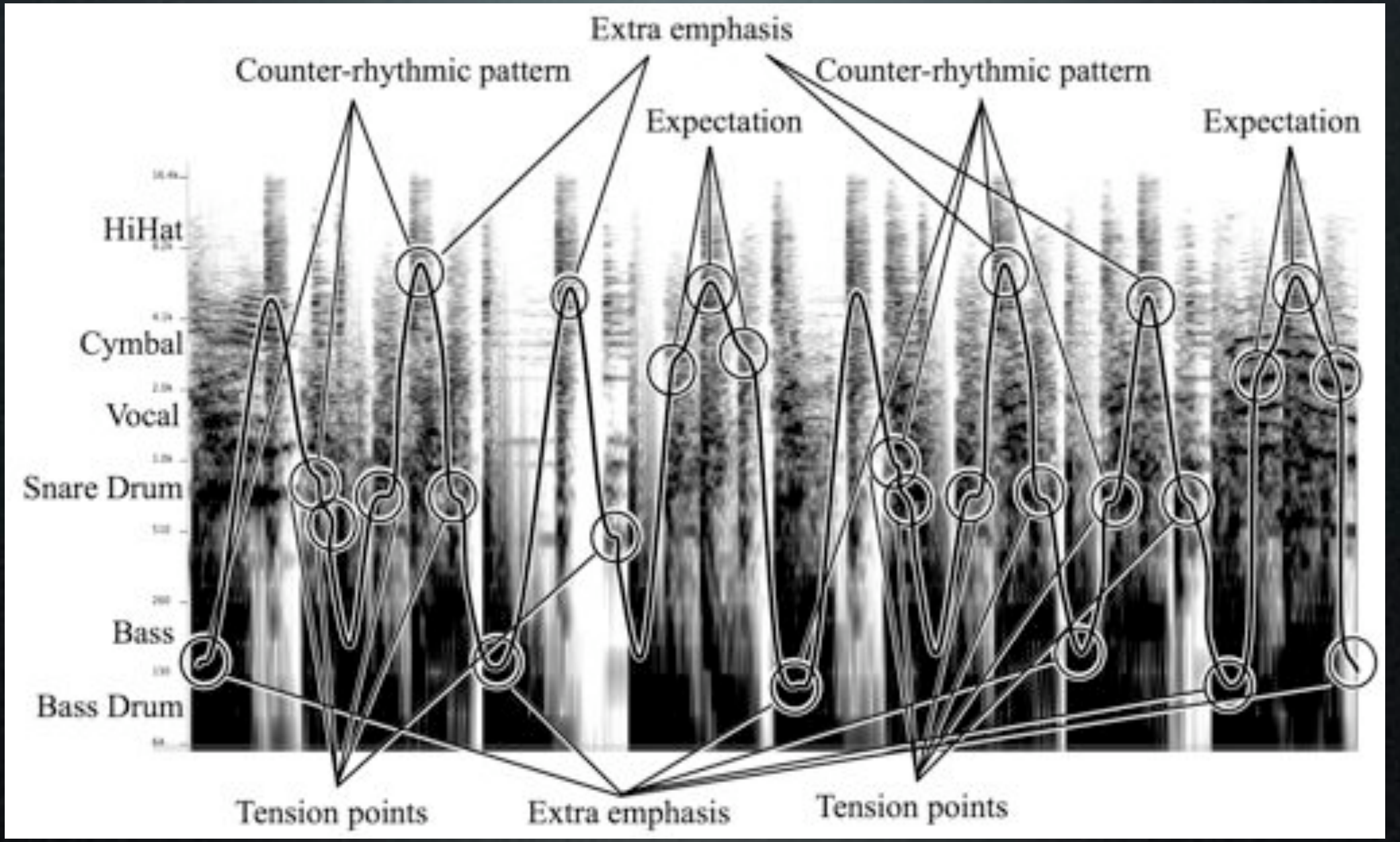


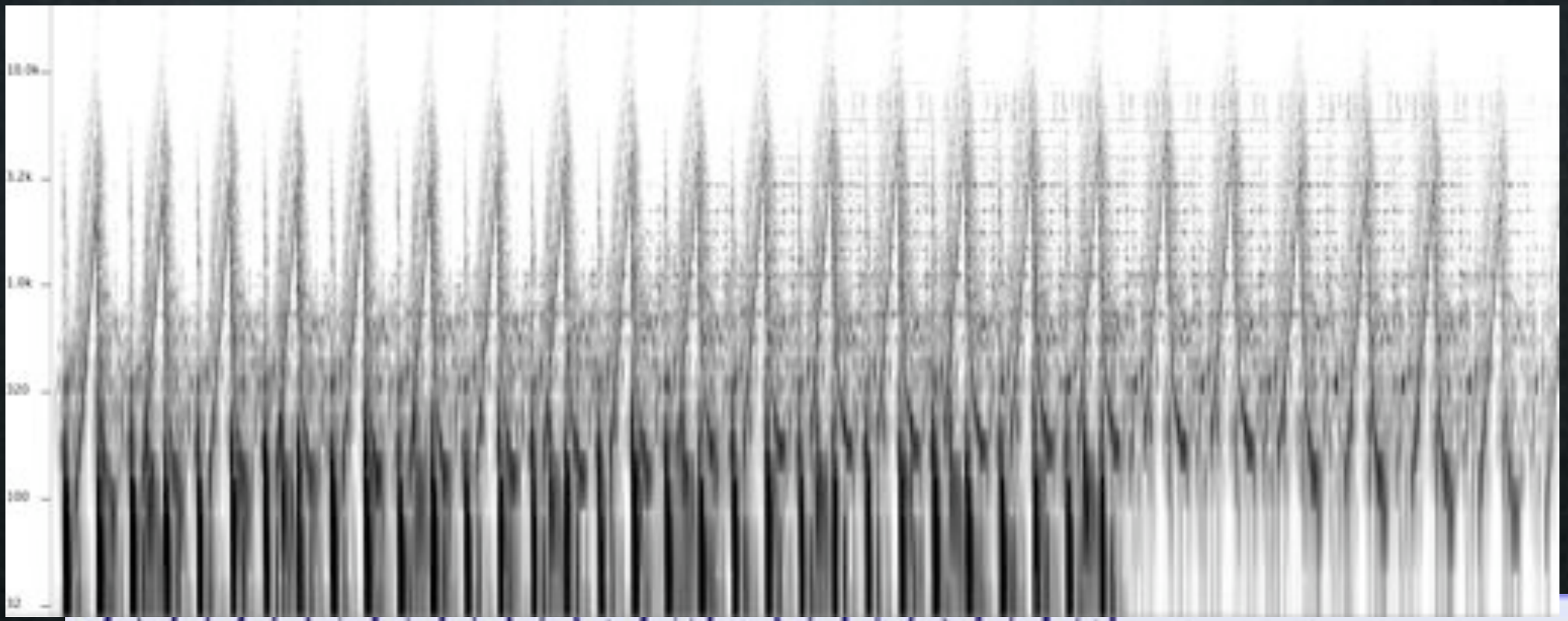
1. Original
2. Cymbal fjernet
3. HiHat fjernet

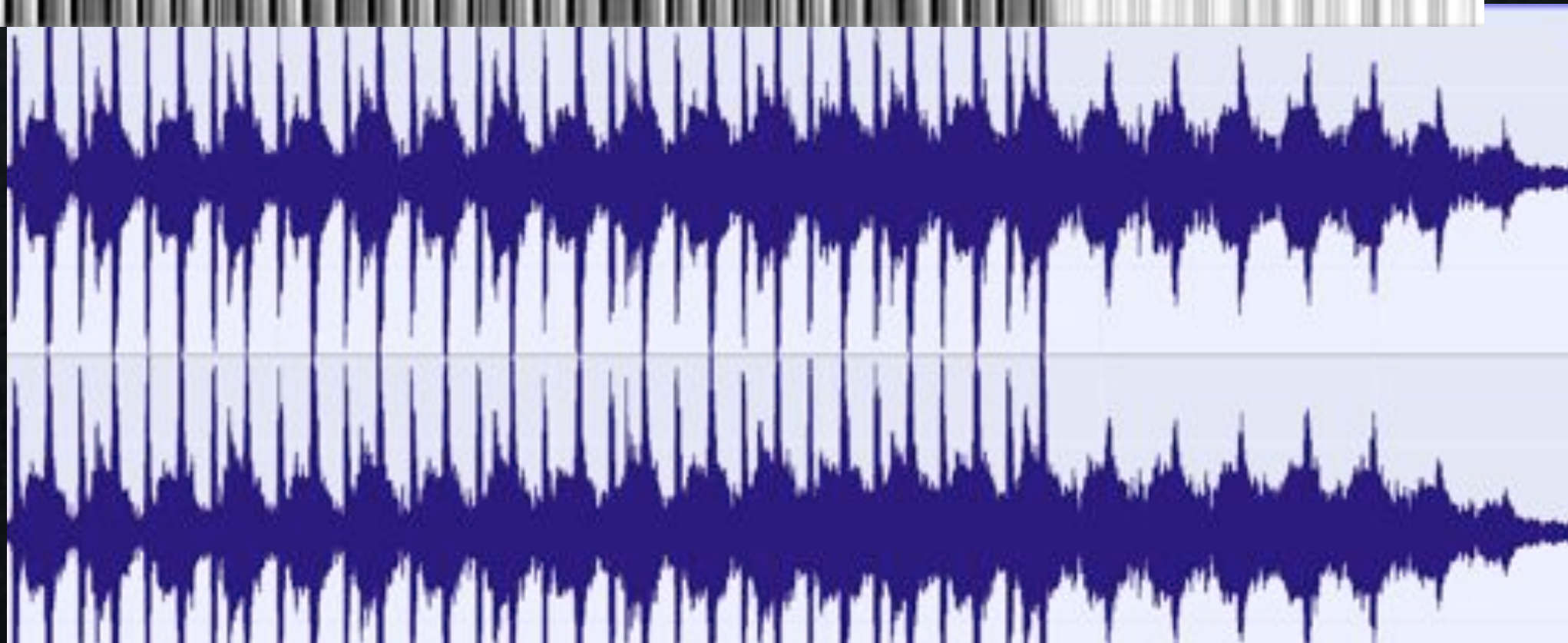

HiHat
Cymbal
Bass Drum

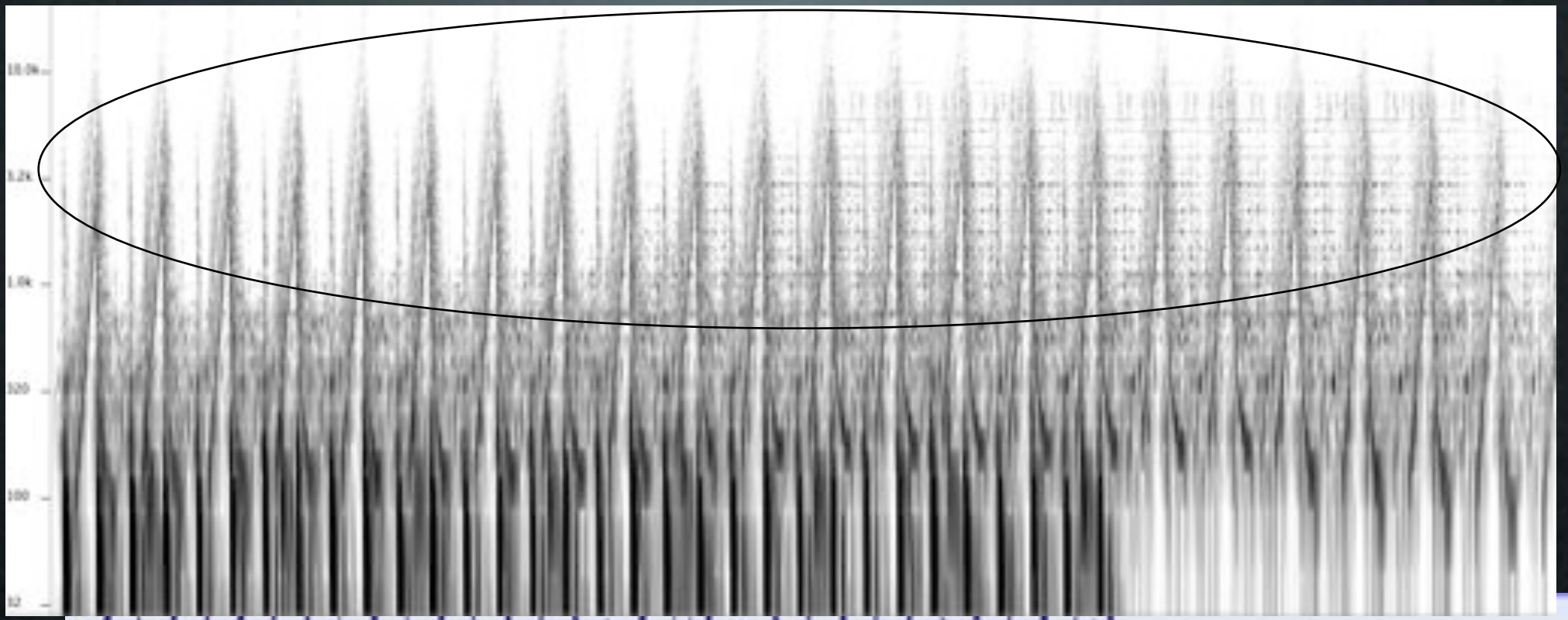


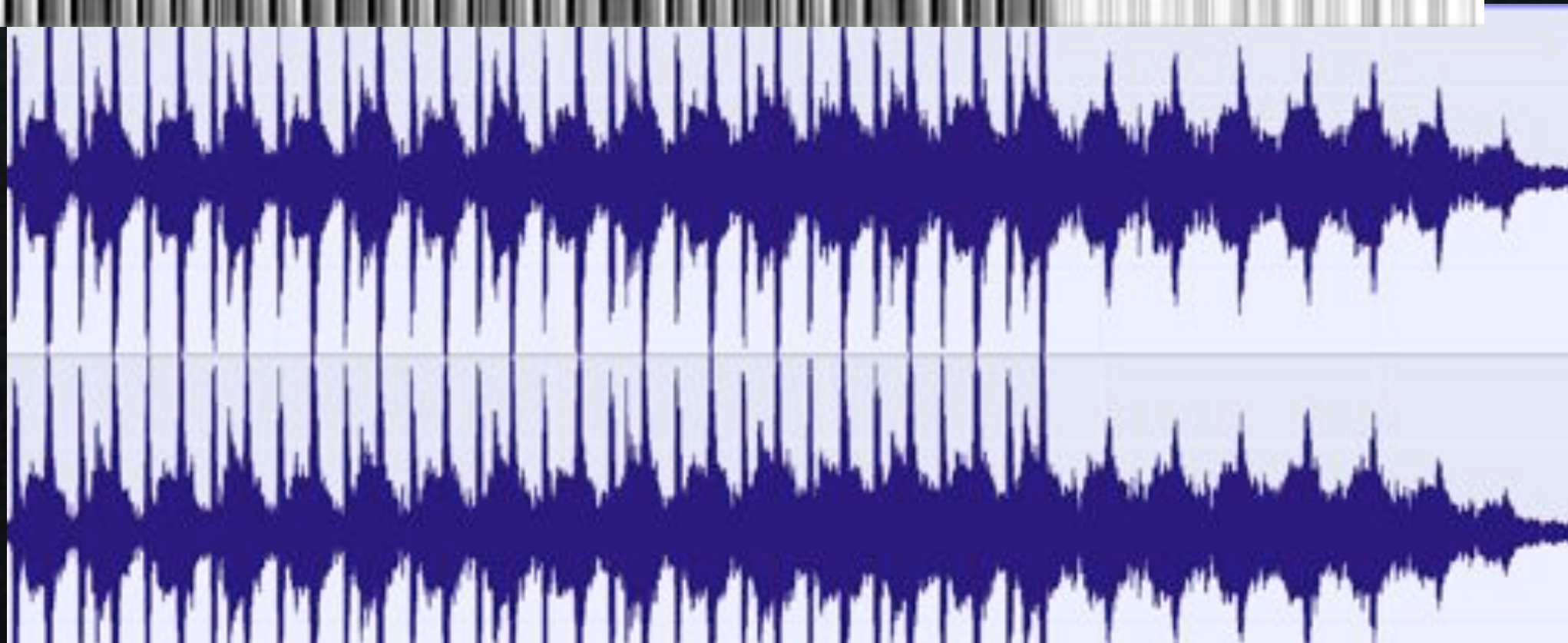

HiHat
Snare Drum
Cymbal
Bass Drum
Tension
Extra emphasis
Expectation
Tension
Extra emphasis
Expectation

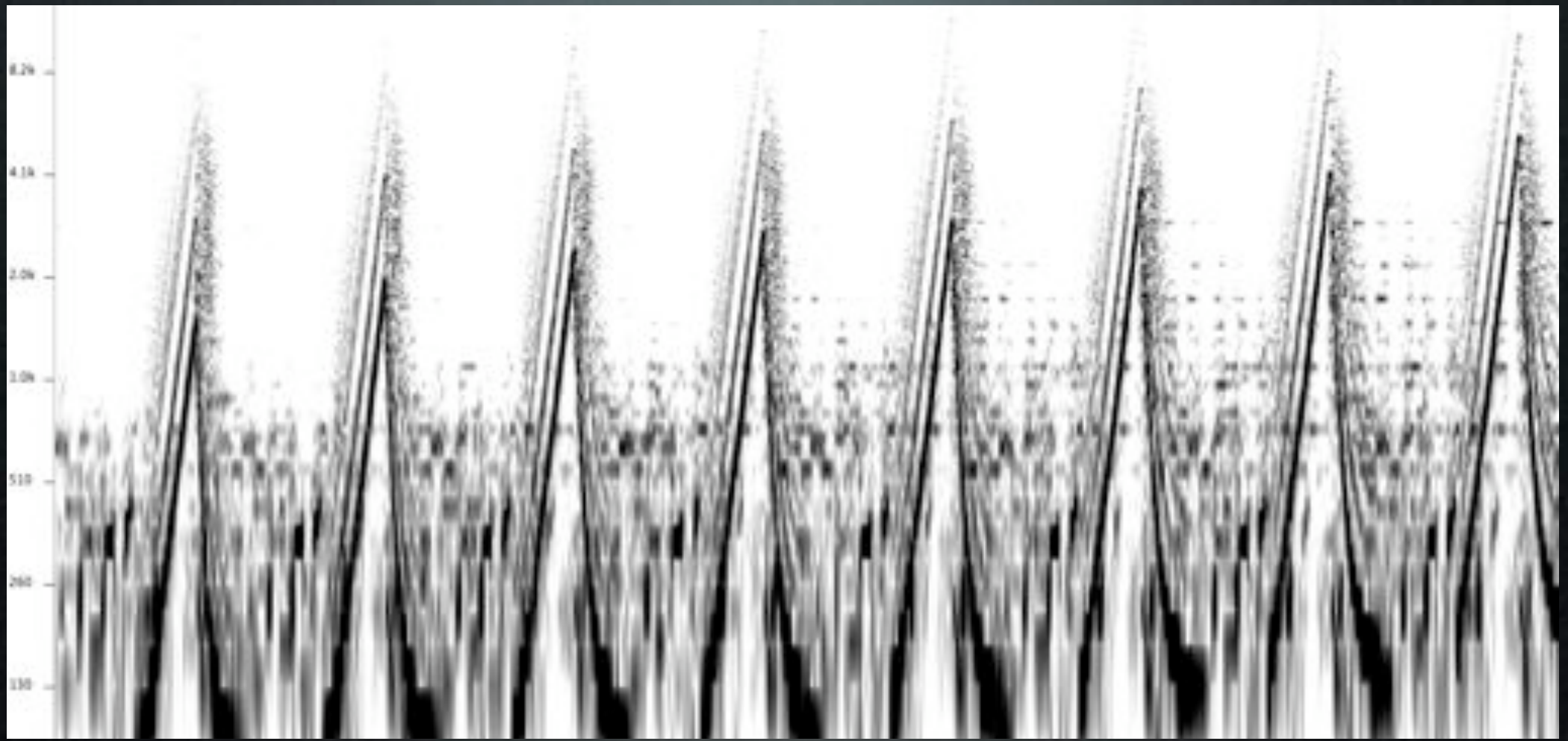

Extra emphasis
Counter-rhythmic pattern
Counter-rhythmic pattern
Expectation
Expectation
HiHat
Cymbal
Vocal
Snare Drum
Bass
Bass Drum
Tension points
Extra emphasis
Tension points

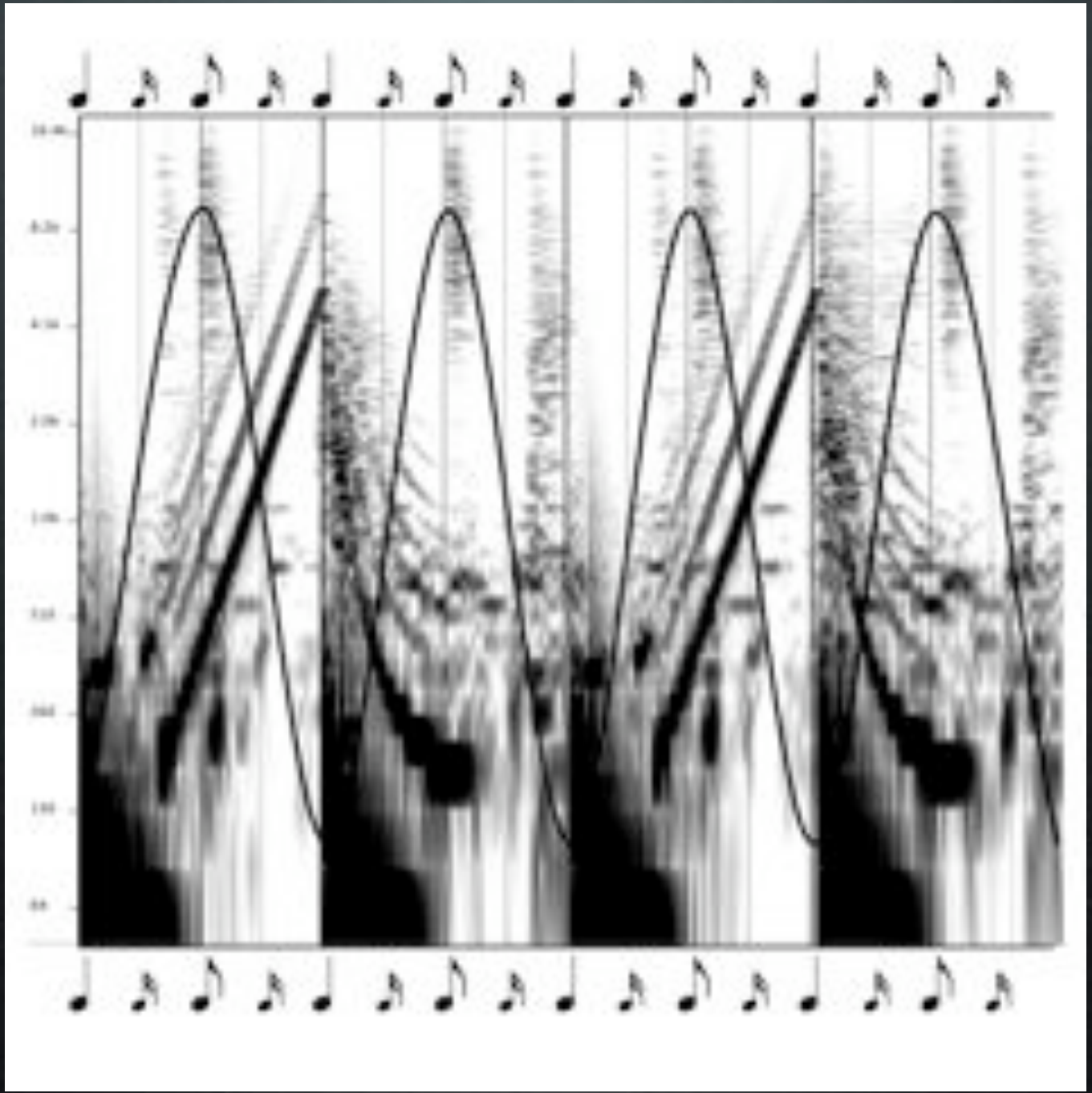

10.0k
3.2k
1.0k
320
100
32

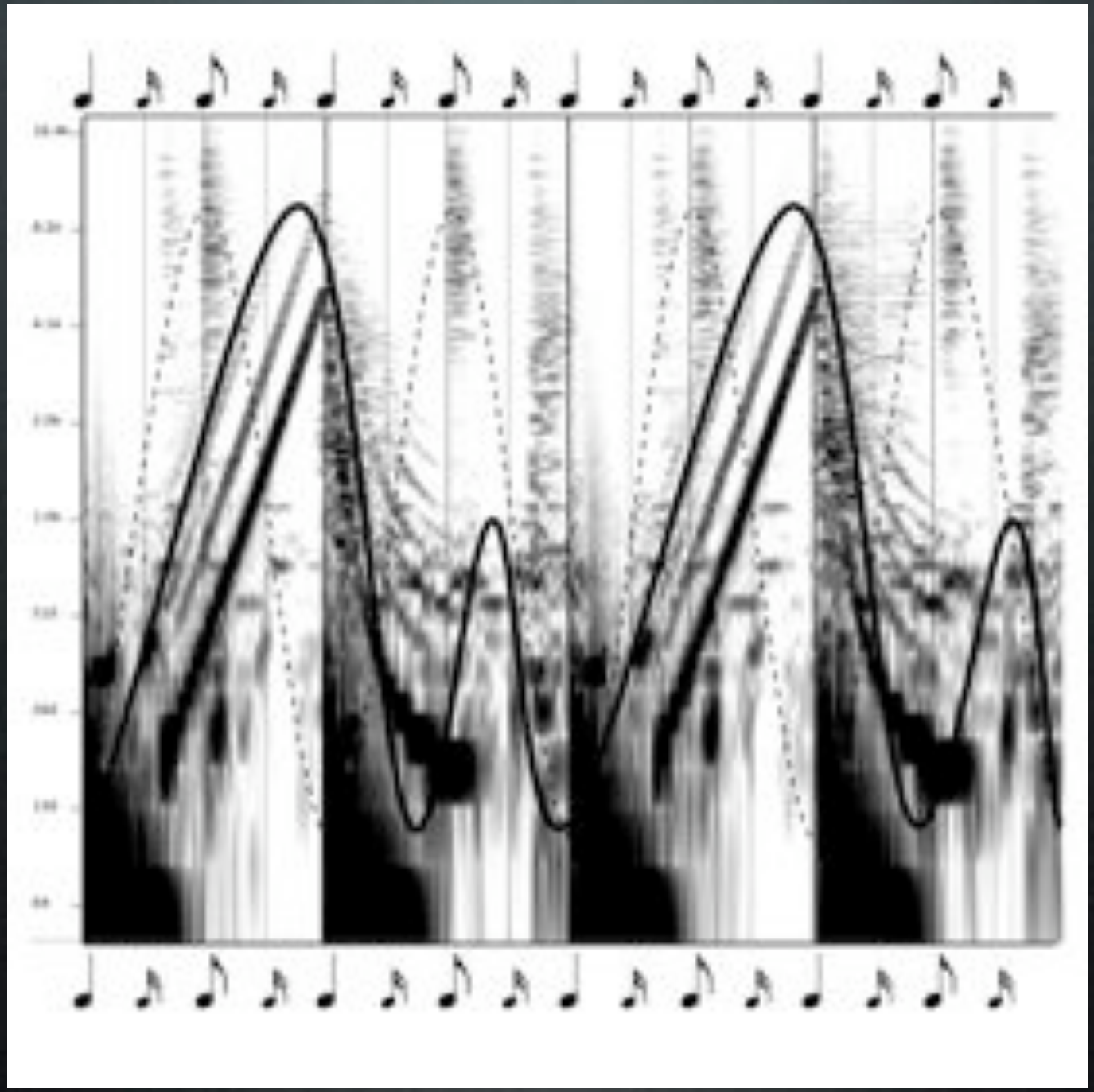


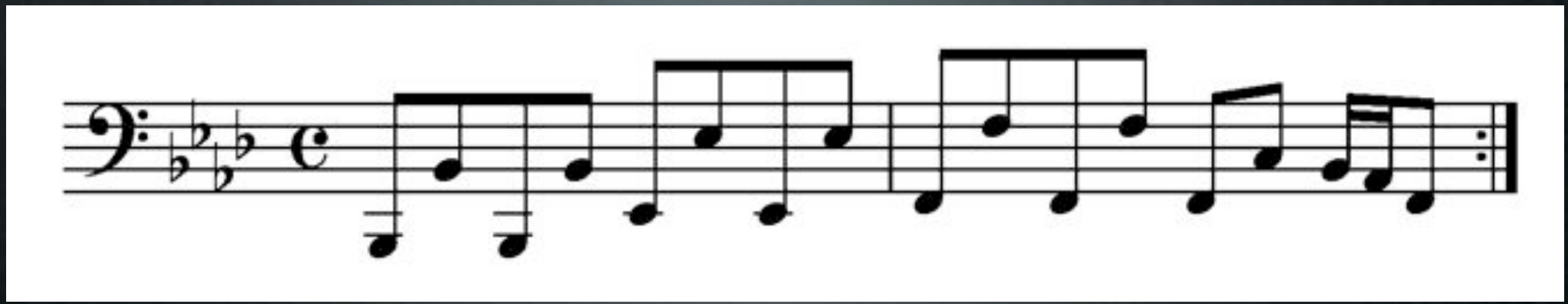

10.0k
3.2k
1.0k
320
100
32




8.2k
4.1k
2.0k
1.0k
510
260
130

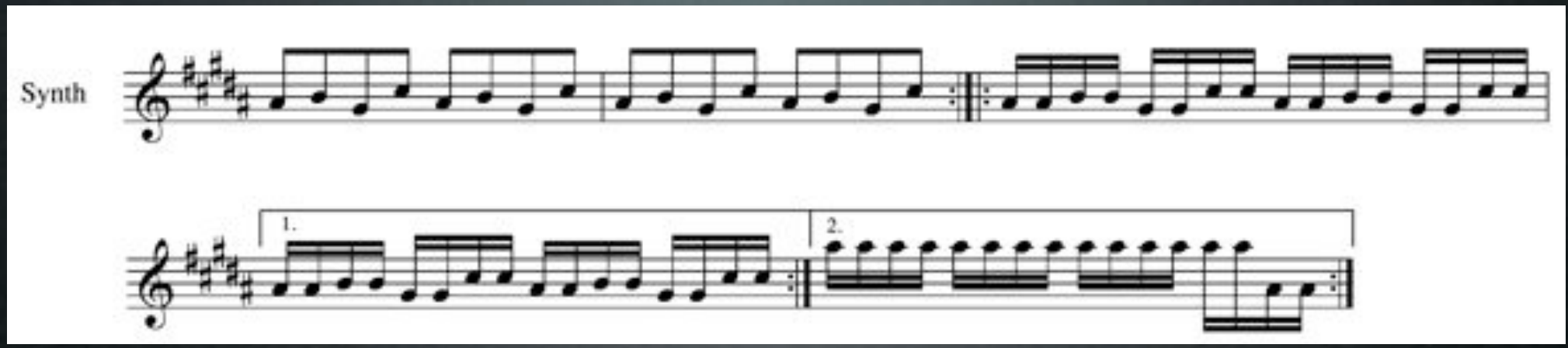






Sylvester: “You Make Me Feel (Mighty Real)” (1978)

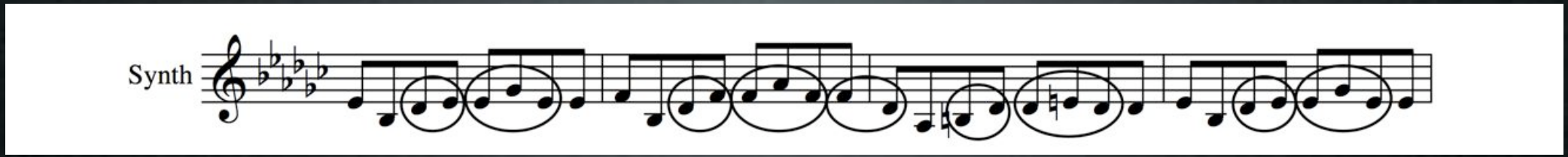
Bpm: 131



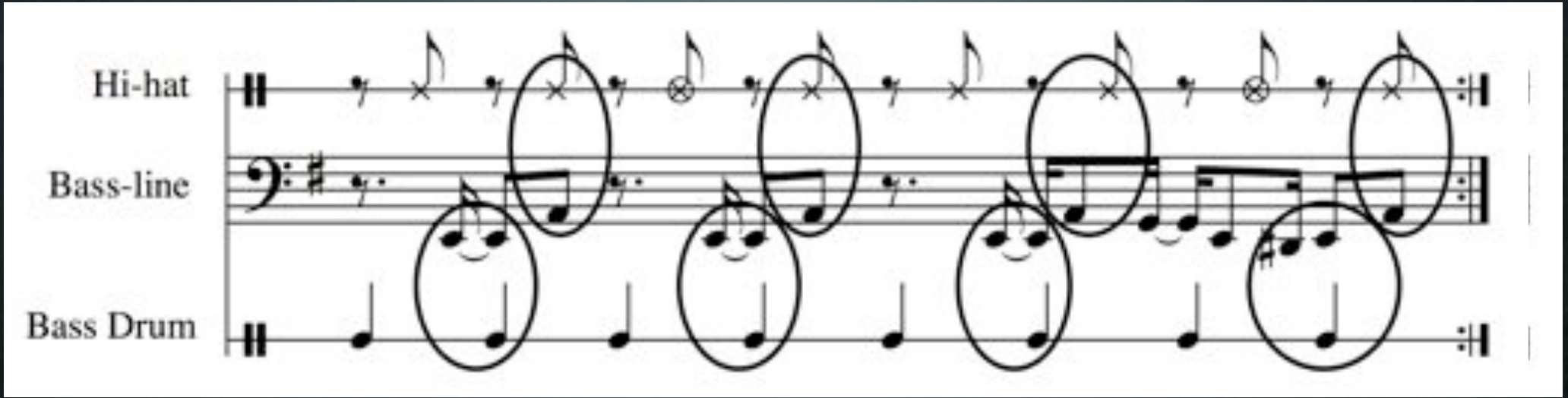
Madonna: “Give It 2 Me” (2008)

Bpm: 127

Svein Berge og Torbjørn Brundtland

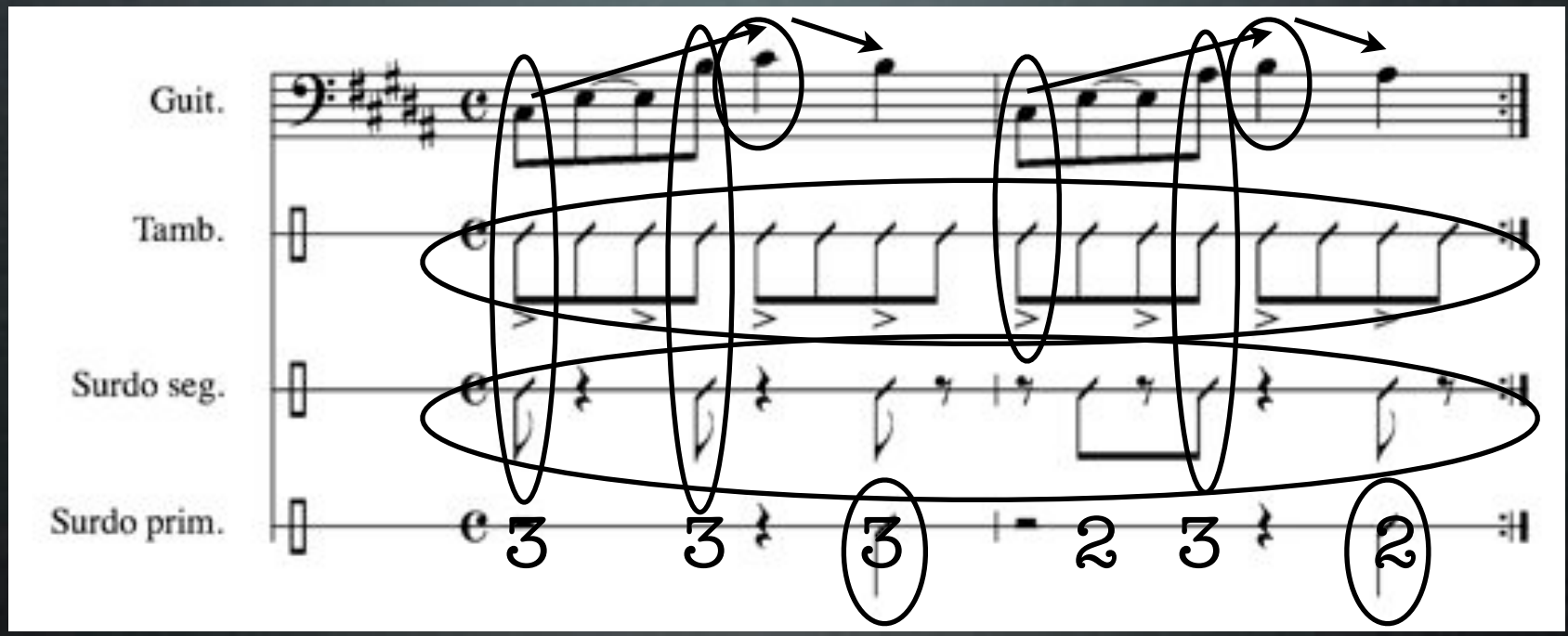


Röyksopp: “Remind Me” (Someone Else’s Radio Remix) (2002)



Fritz Valley Project: “Blindness (Harmonic Excursion)” (1998)

Bpm: 127


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

Hvordan deltar vi i musikklytting?