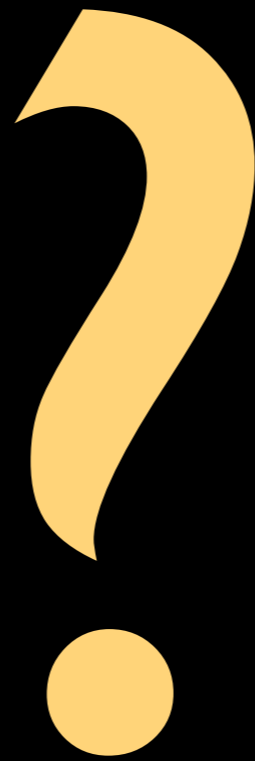


Øvelse 1: Kvalitativ videoanalyse

Alexander Refsum Jensenius
MUS2006 - v2013

Snakebit

Lytt





Lytt

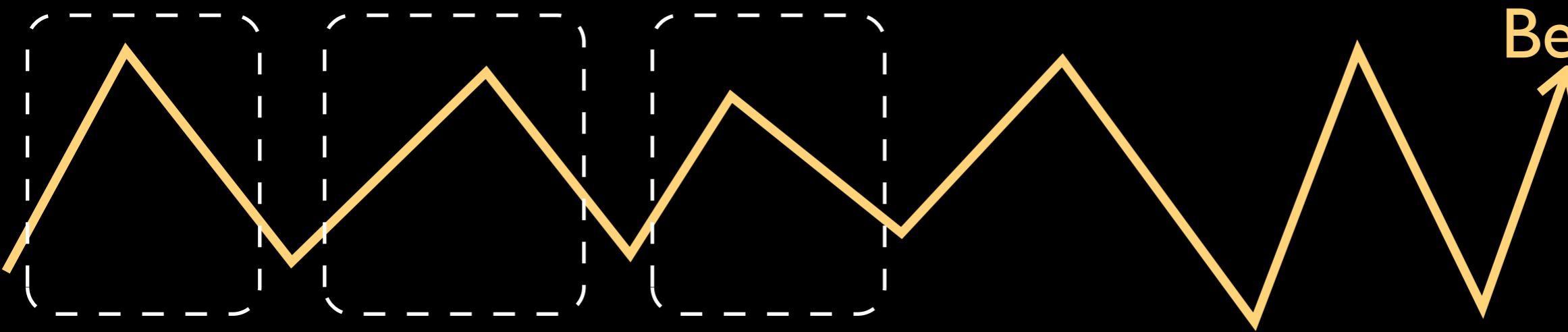
Bevegelsessporing

kvalitativ

kvantitativ

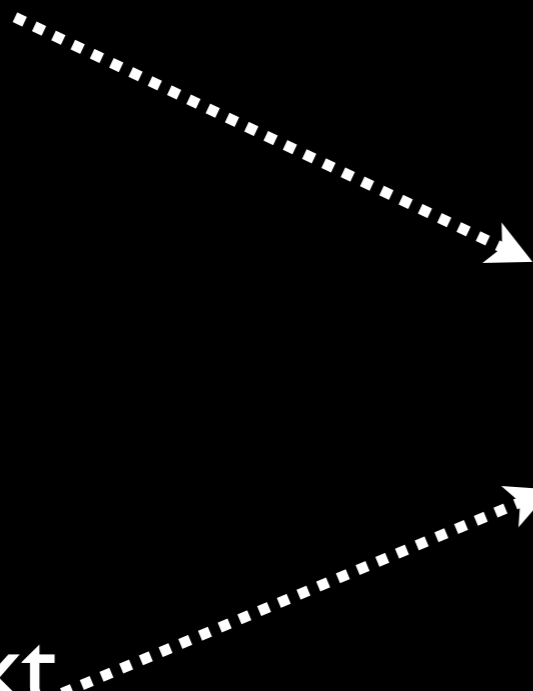
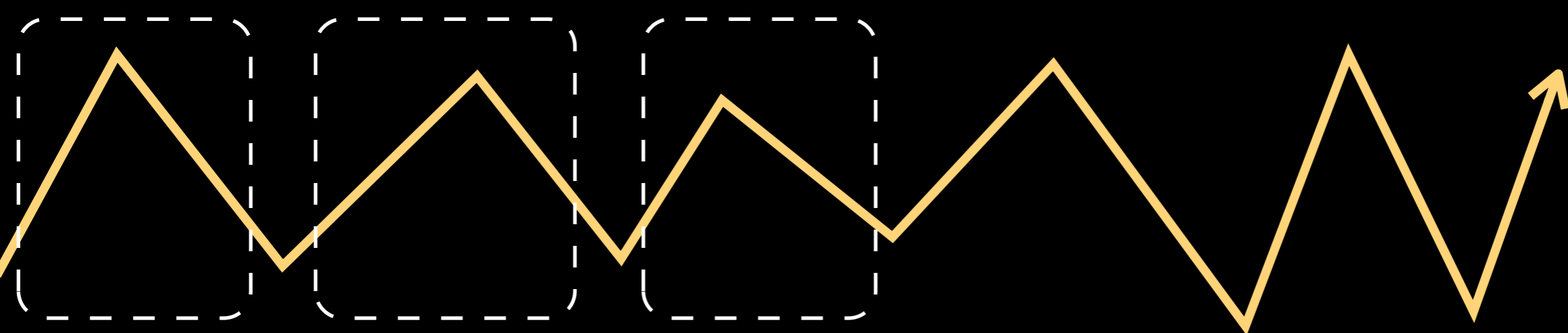
Handling

Bevegelse



Lydobjekt

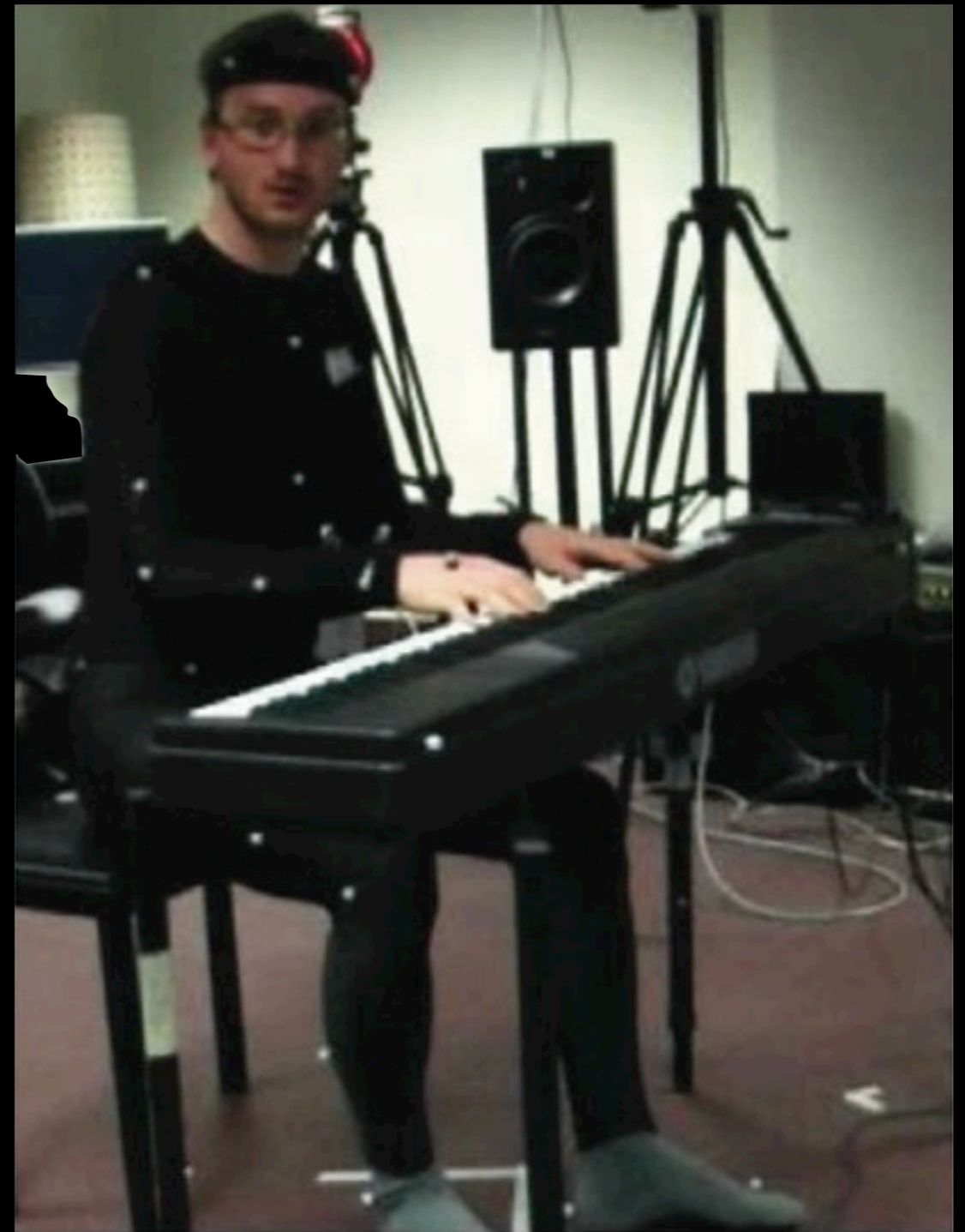
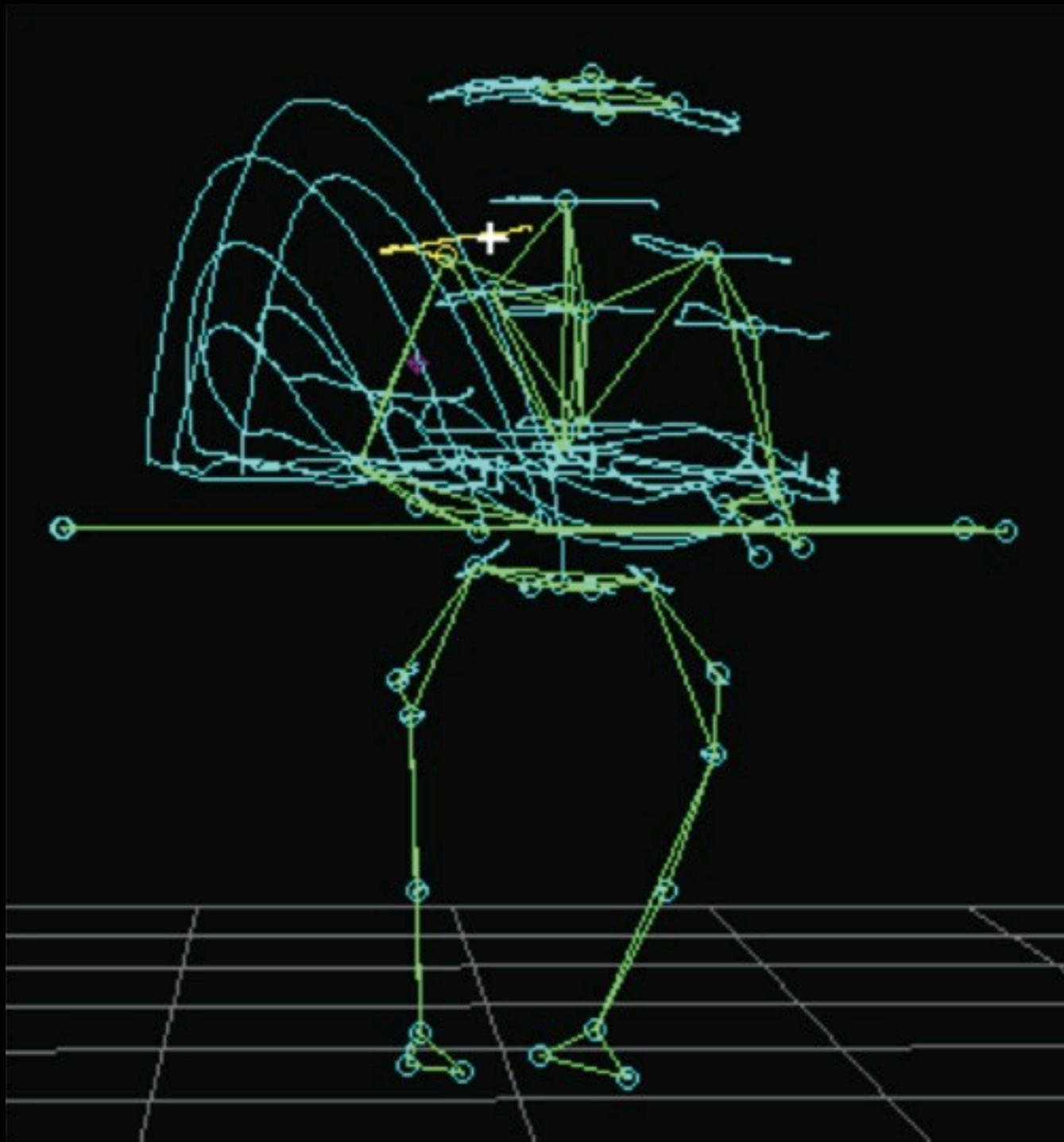
Lyd



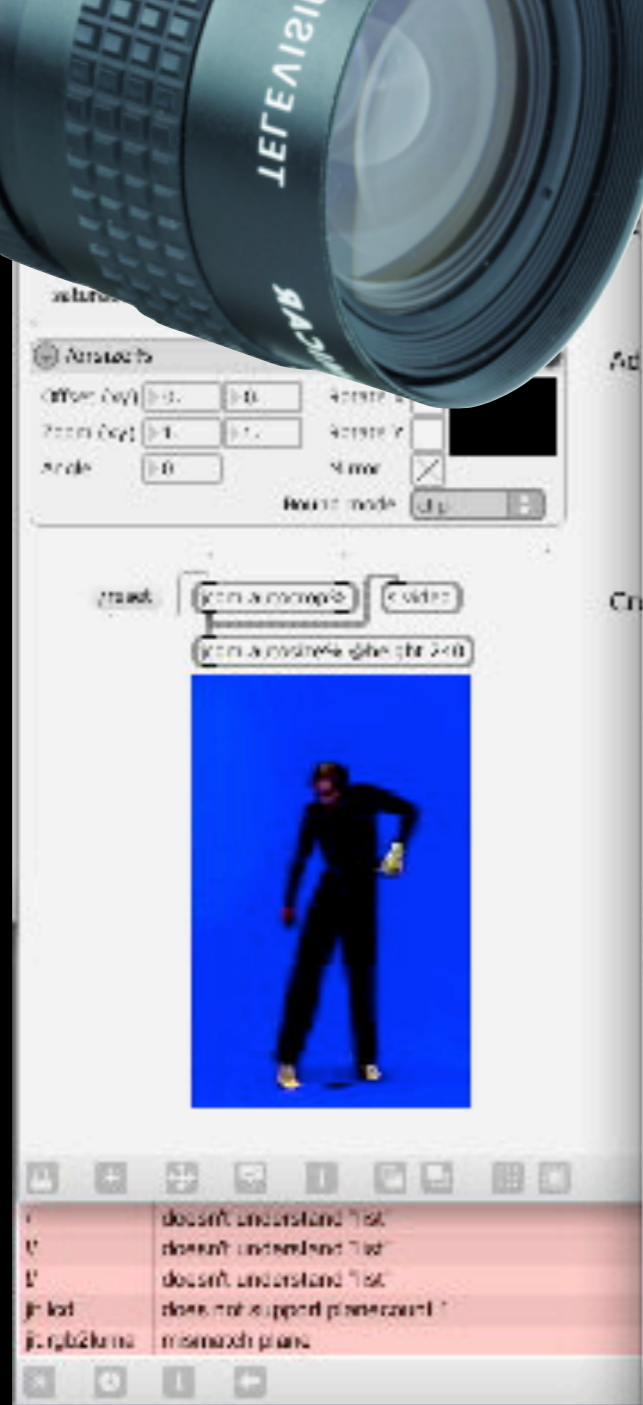
Bevegelsessporing

hvorfor?

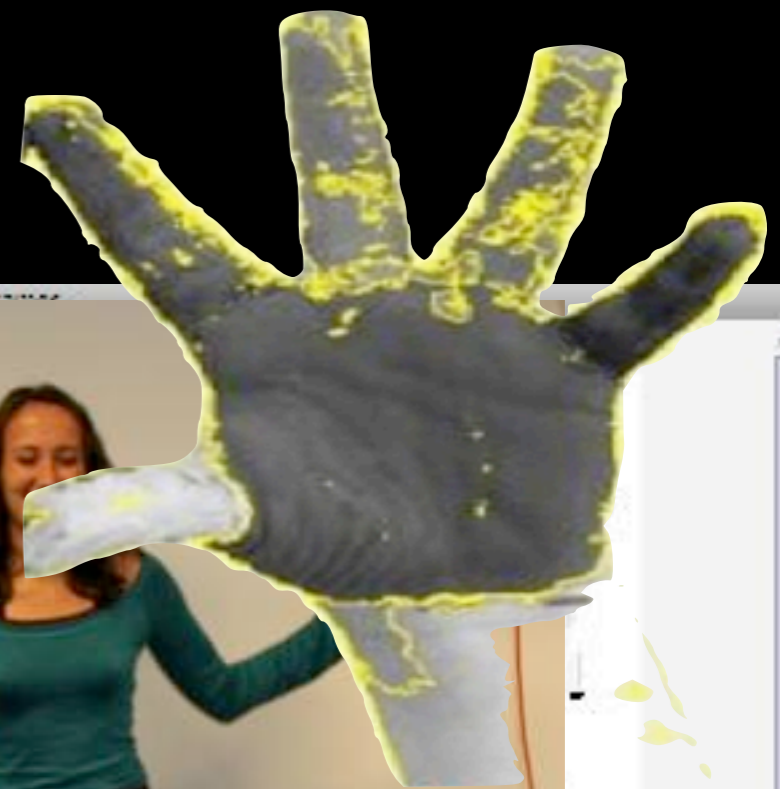
hvordan?



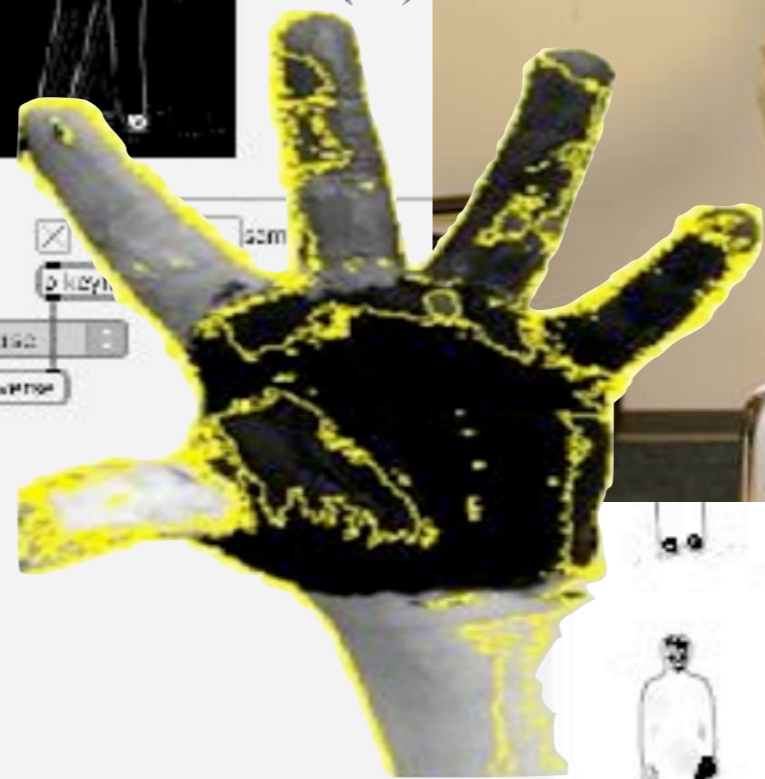
optical infrared marker-based motion capture



(a)



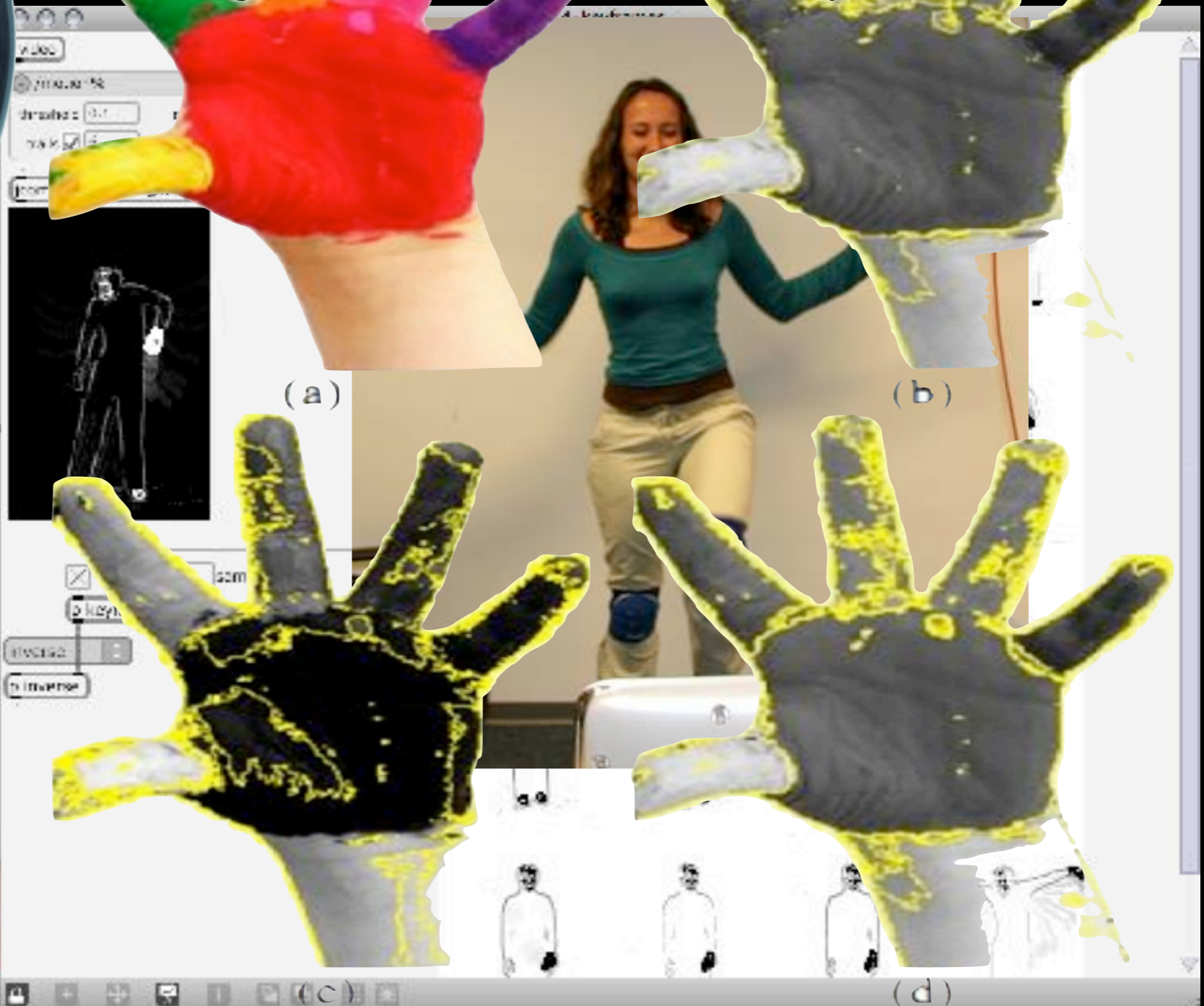
(b)



(c)



(d)



optical

marker-based motion capture

KINECT™
for  **XBOX 360.**



optical infrared

motion capture



inertial

sensor-based motion capture





mechanical

sensor-based motion capture



electromagnetic sensor-based motion capture



physiological sensor-based motion capture



Optical (visual)



Optical (infrared)



Inertial



Electromagnetic



Mechanical motion capture

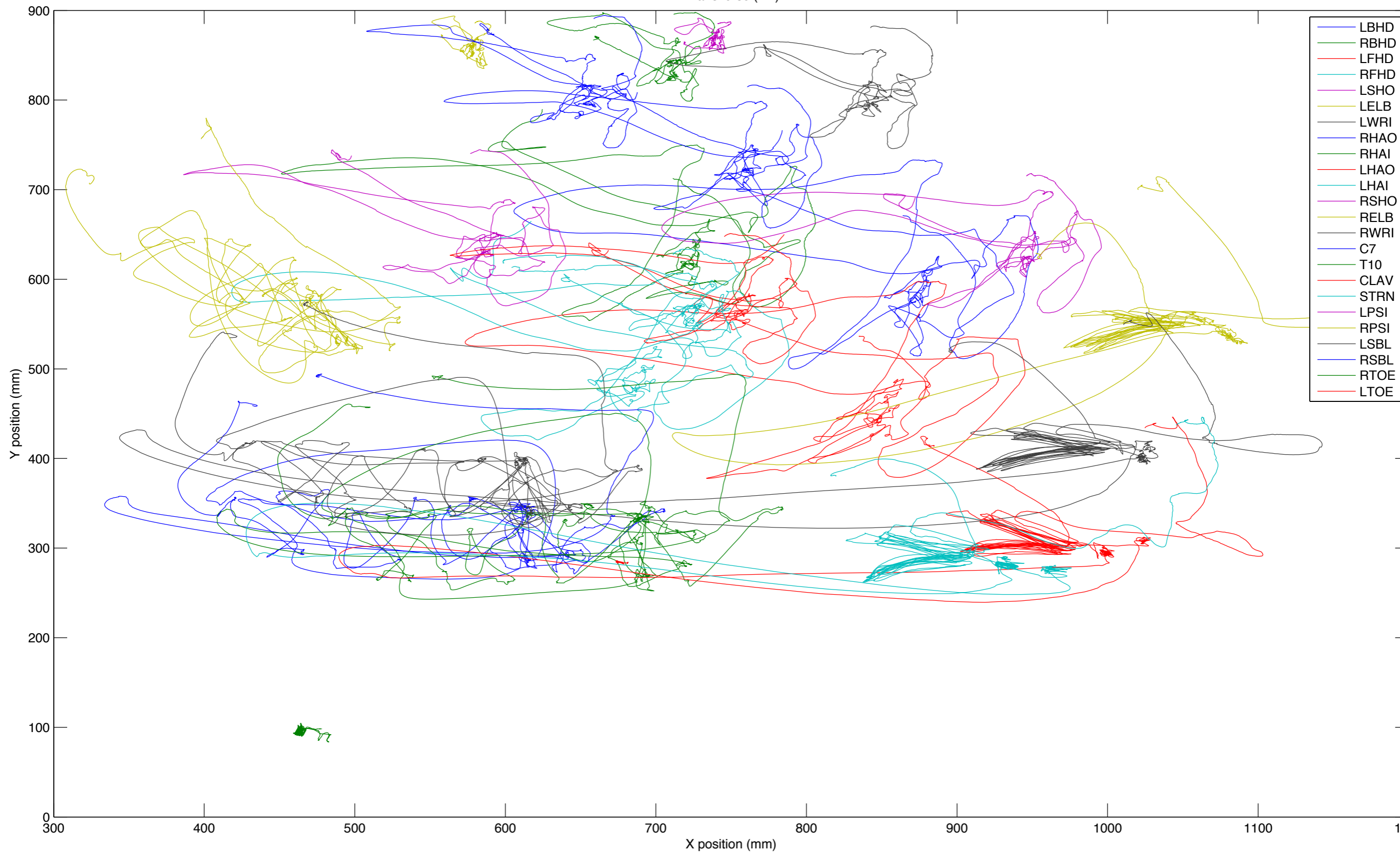


Physiological

| | Inertial/ magnetic | Mechanical | Electro- magnetic | Optical (visual) | Optic (infrared) | Physiological |
|----------|---|---|--|---|--|---|
| + | <ul style="list-style-type: none"> - flexible - small | <ul style="list-style-type: none"> - flexible - small | <ul style="list-style-type: none"> - resolution - identification - absolute | <ul style="list-style-type: none"> - flexible - no cables - no markers - accessible | <ul style="list-style-type: none"> - speed - resolution - # markers | <ul style="list-style-type: none"> - indirect motion sensing |
| - | <ul style="list-style-type: none"> - relative | <ul style="list-style-type: none"> - relative | <ul style="list-style-type: none"> - cable - short range | <ul style="list-style-type: none"> - 2D - speed - resolution - identification | <ul style="list-style-type: none"> - markers - calibration - identification | <ul style="list-style-type: none"> - indirect motion sensing |

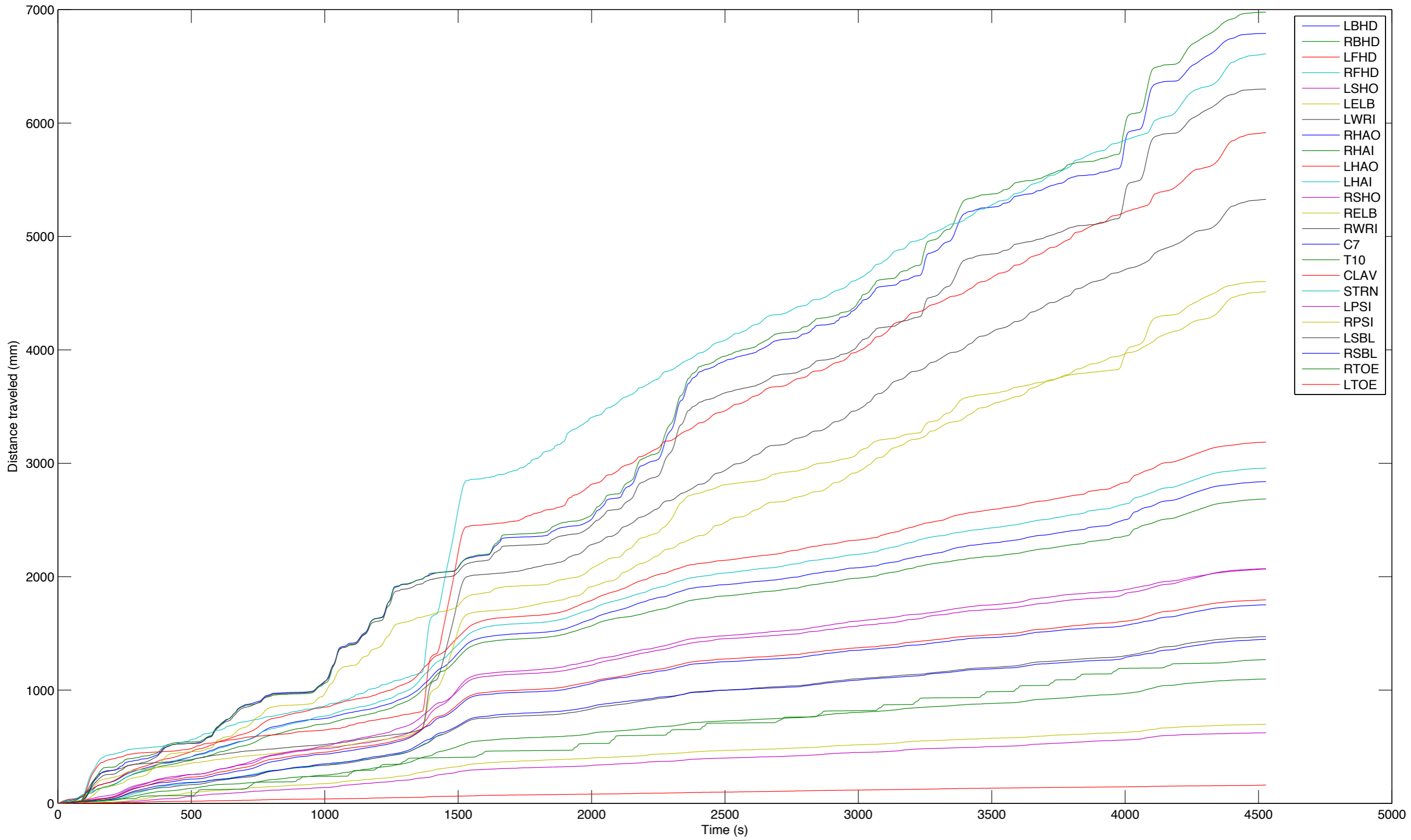


Transverse (XY)



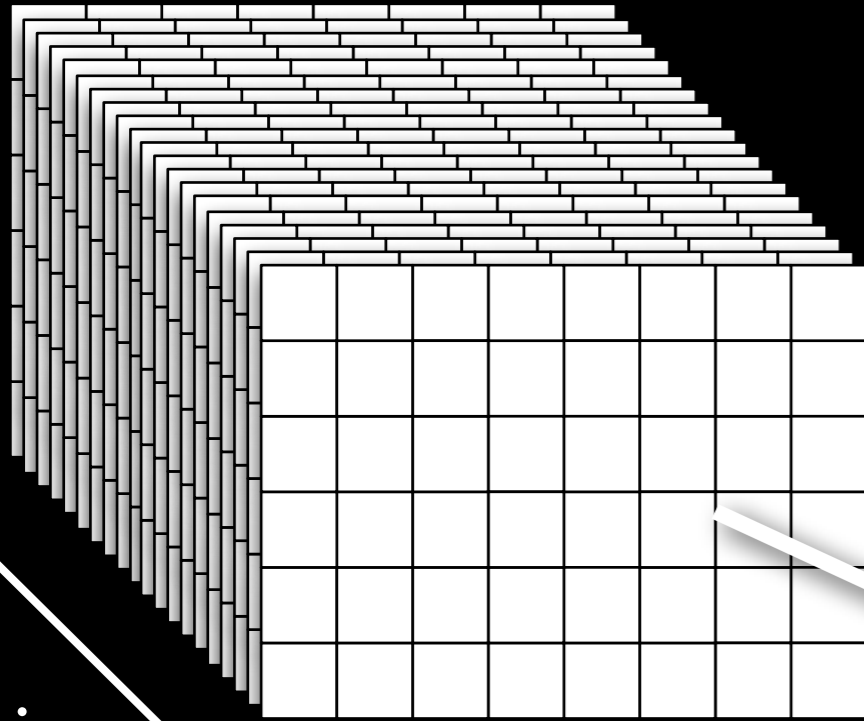


Cumulative distance



Video - representasjon & visualisering

matrix

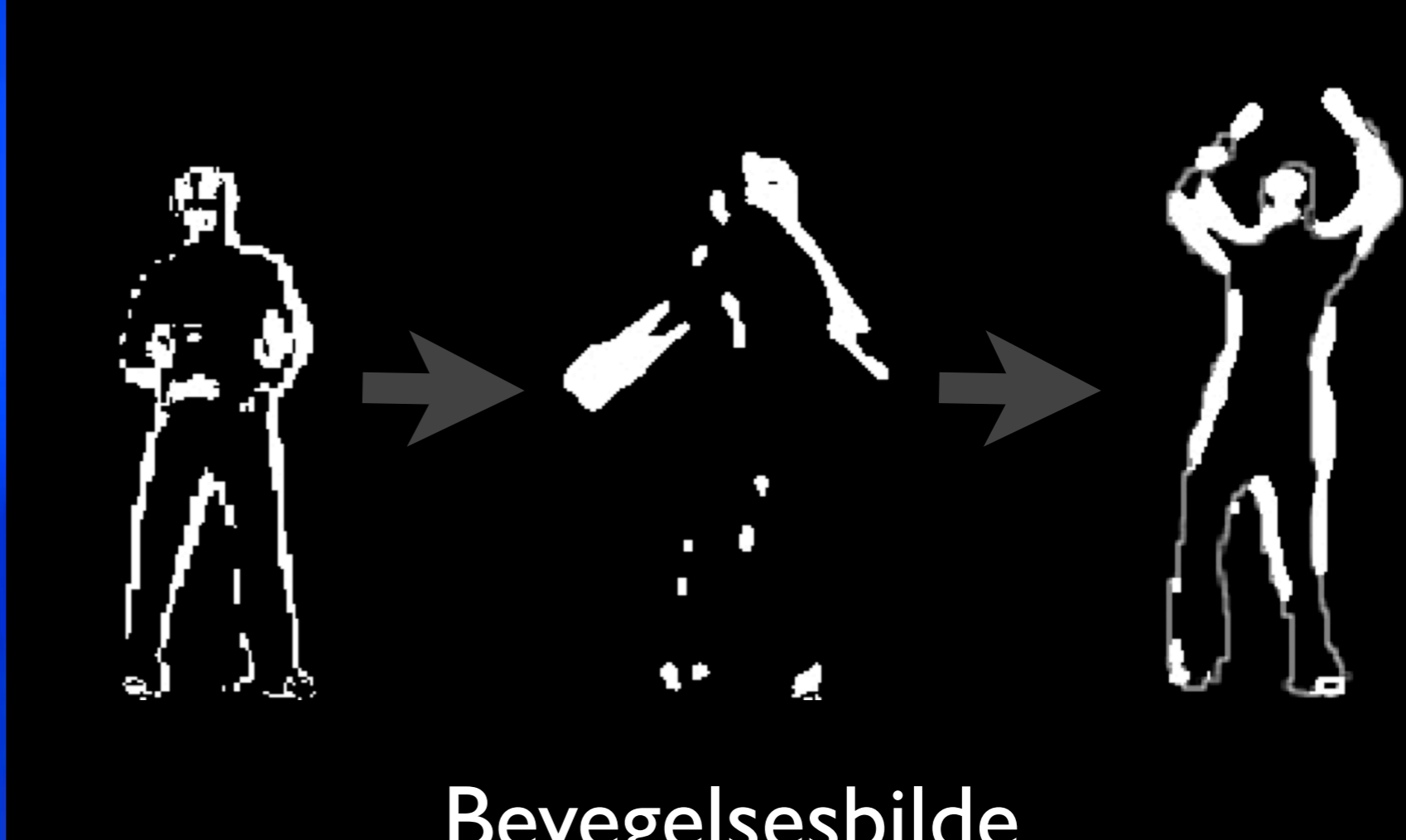


time

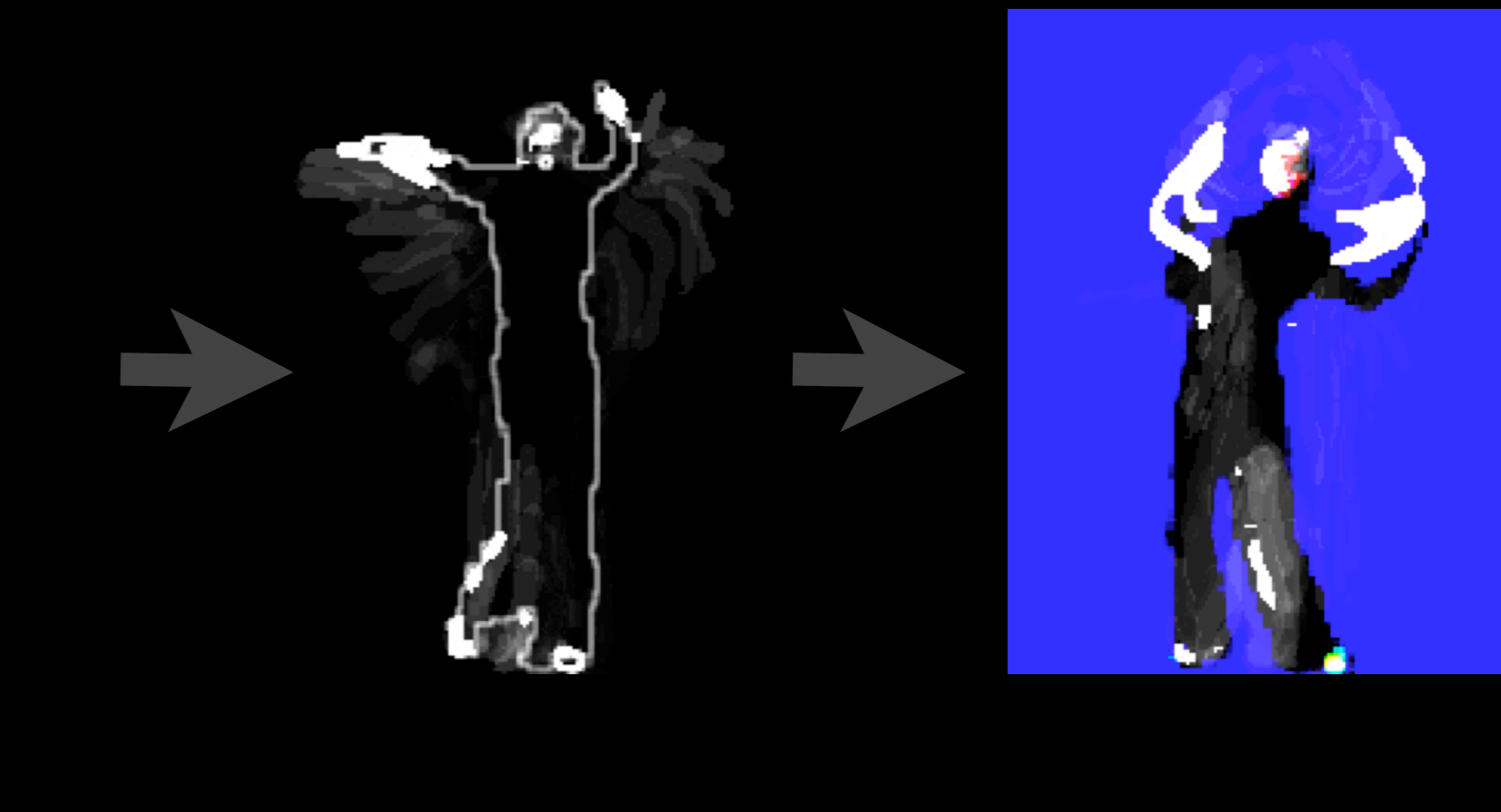
~25 fps

| | | | | | | | | | | |
|-----|-----|-----|--------------|-----|-----|-----|-----|-----|-----|----|
| 5 | 24 | 100 | Blue | | 23 | 64 | 73 | | | |
| 65 | 47 | 34 | Green | | 89 | 134 | 32 | 56 | | |
| 23 | 65 | 125 | Red | | 187 | 34 | 76 | 153 | 13 | |
| 36 | 57 | 145 | Alpha | | 187 | 165 | 196 | 42 | 176 | 98 |
| 15 | 98 | 68 | 45 | 33 | 154 | 123 | 34 | 53 | 137 | 34 |
| 78 | 127 | 234 | 254 | 213 | 201 | 176 | 63 | 65 | 163 | 5 |
| 167 | 187 | 198 | 143 | 254 | 241 | 243 | 72 | 12 | 214 | |
| 56 | 123 | 201 | 212 | 176 | 132 | 154 | 163 | 75 | | |
| 34 | 45 | 63 | 63 | 78 | 67 | 98 | 143 | | | |

plane



Bevegelsesbilde

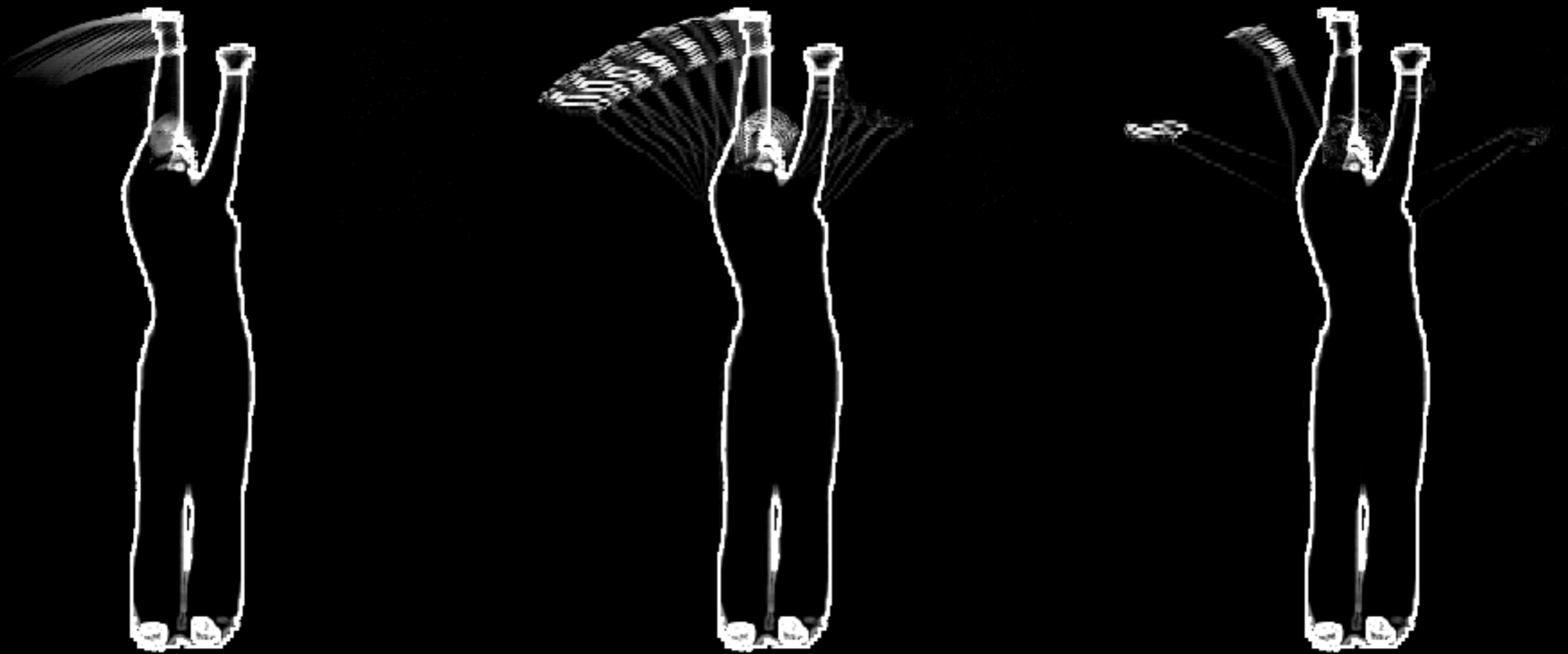


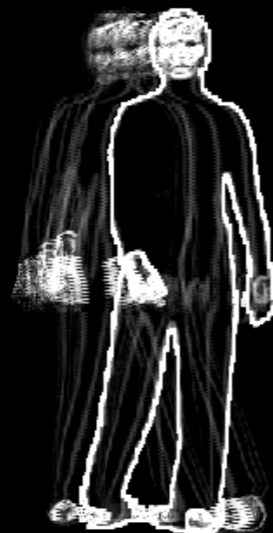
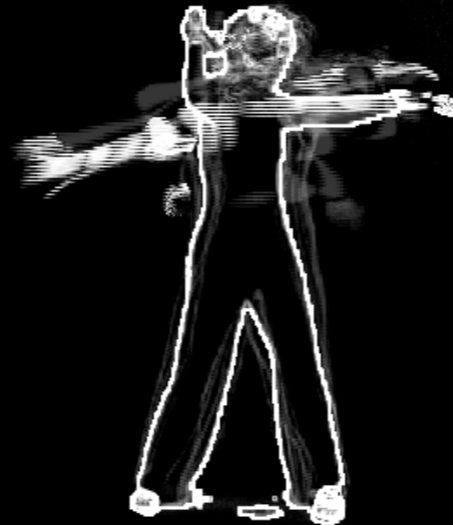


Bevegelseshistoriebilde

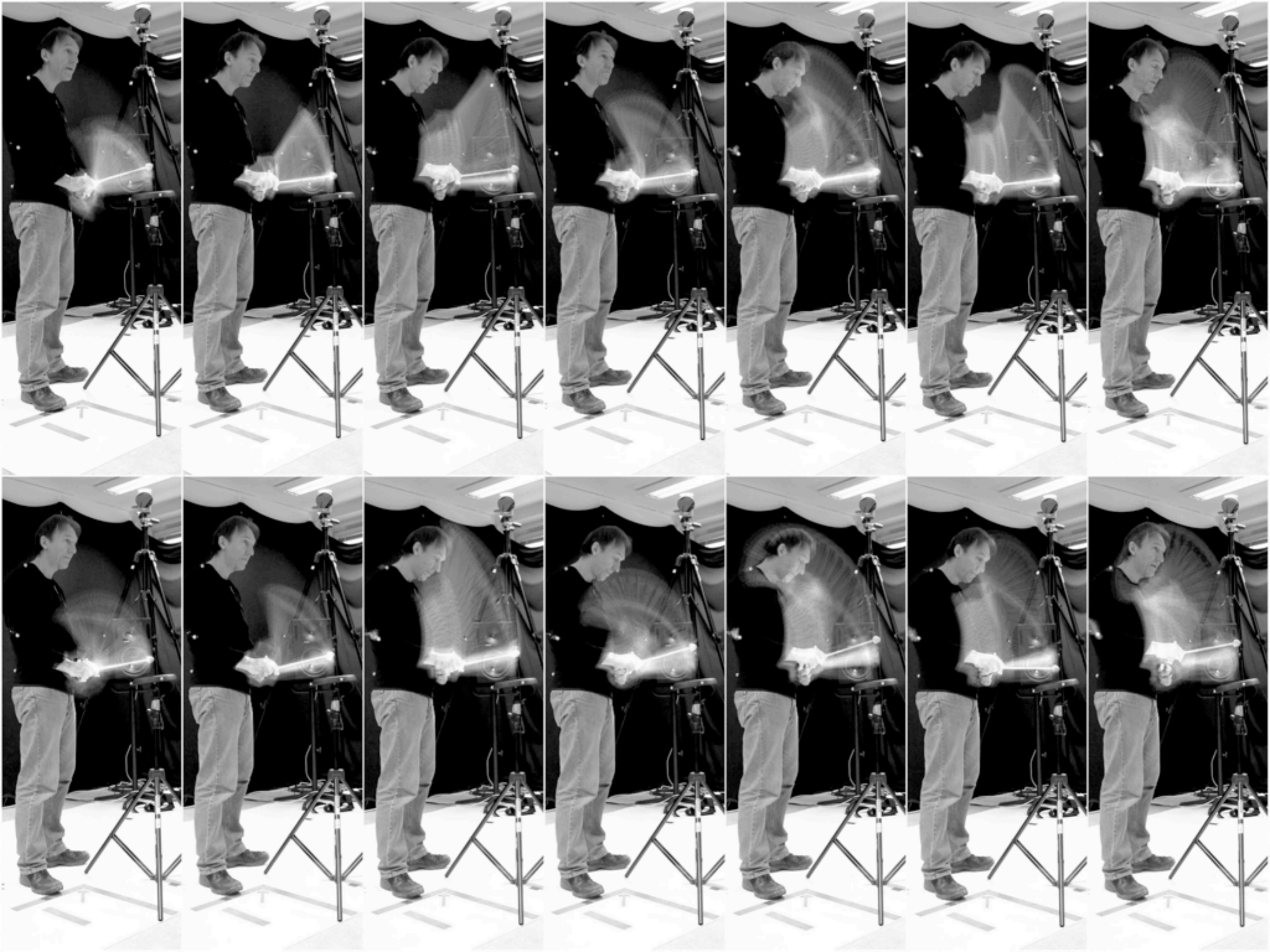


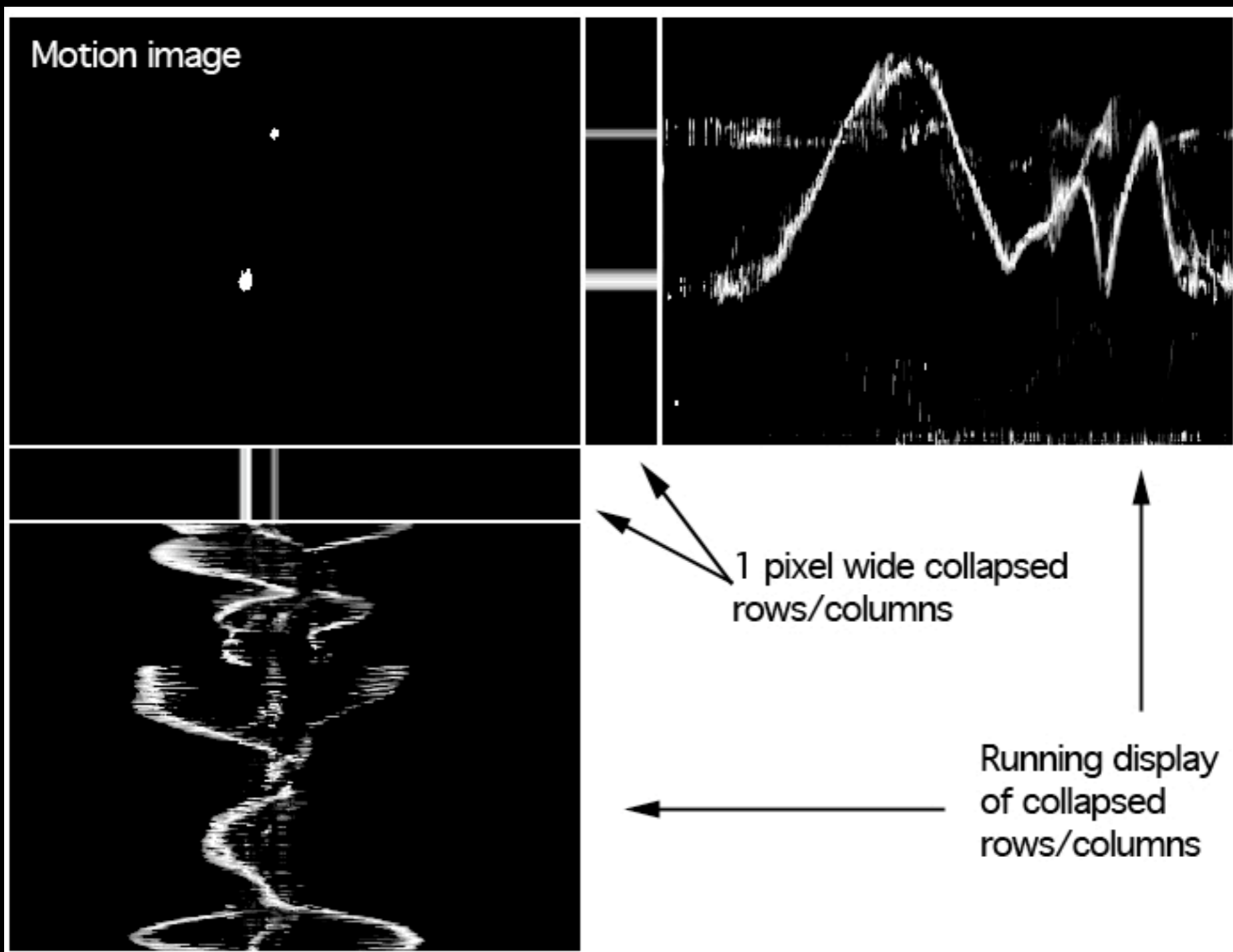
Bevegelsehistorie



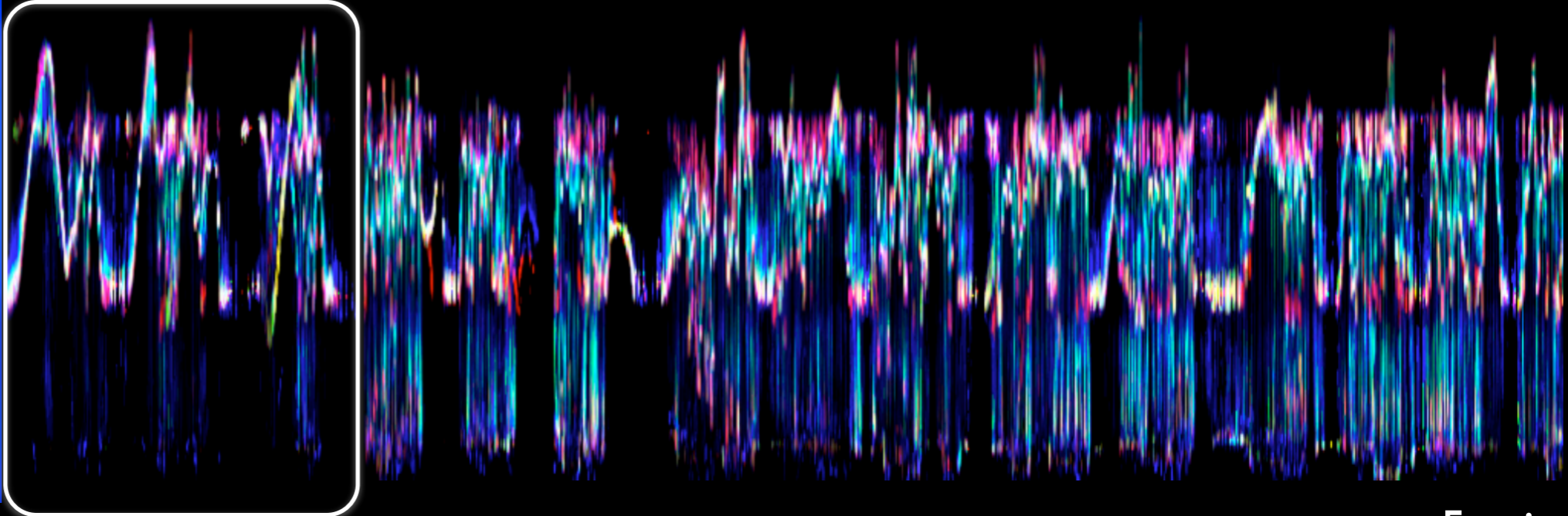


Tidsserie-
bilde



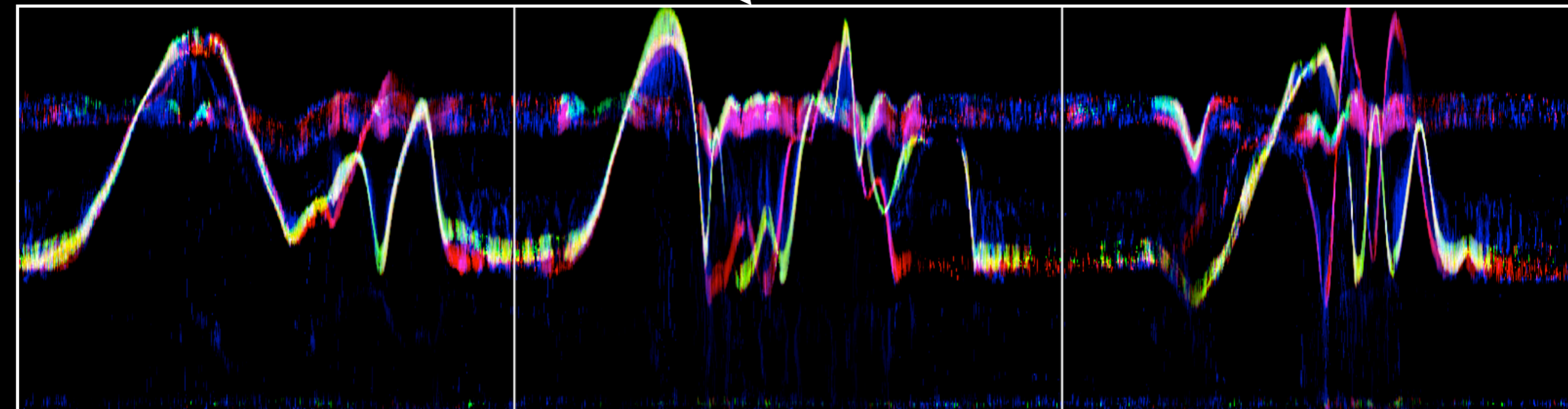


Bevegelseskurve

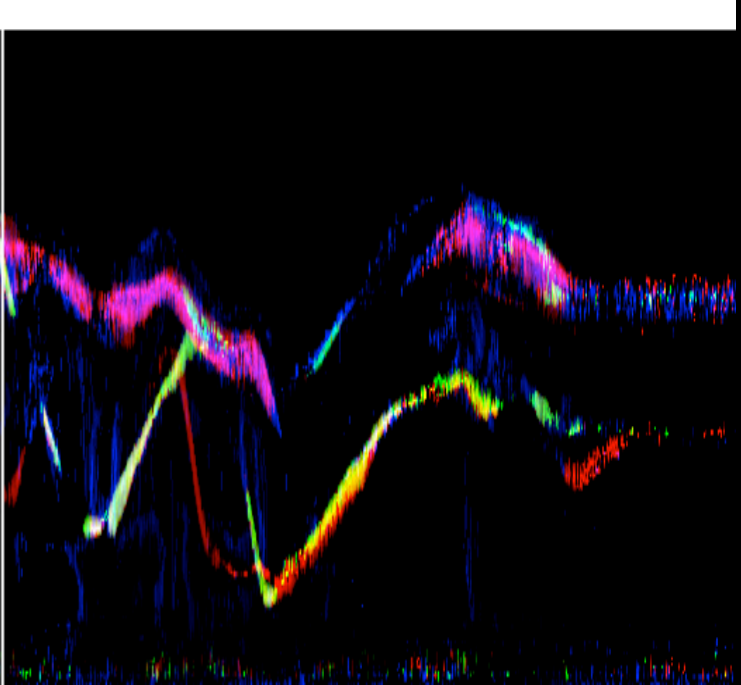
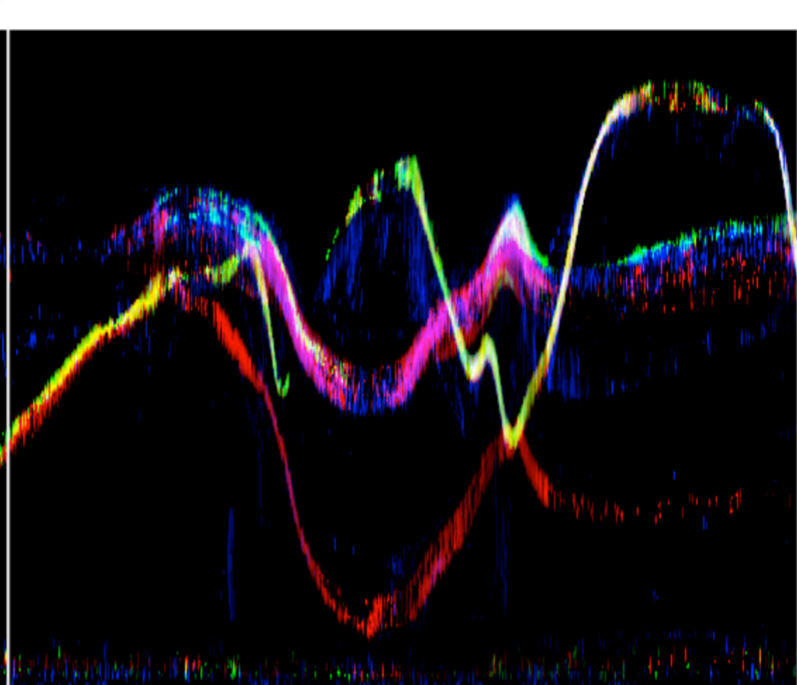
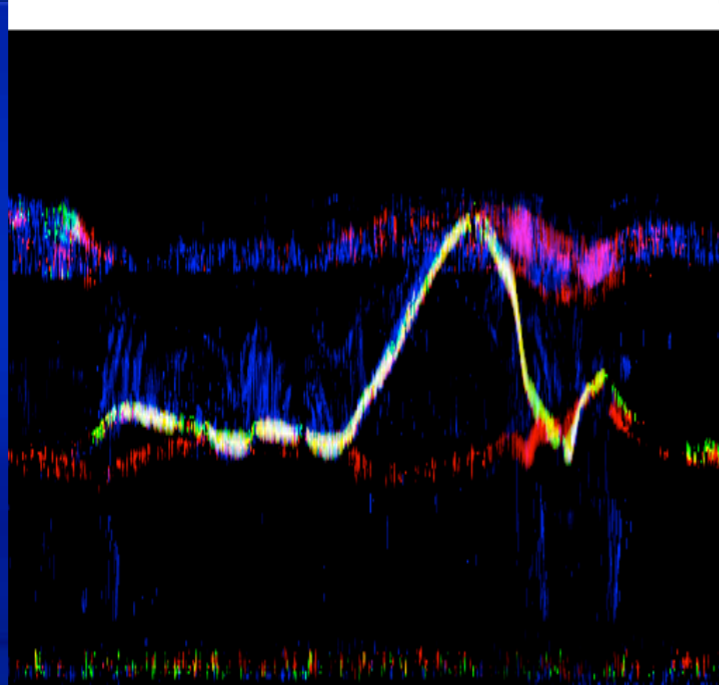
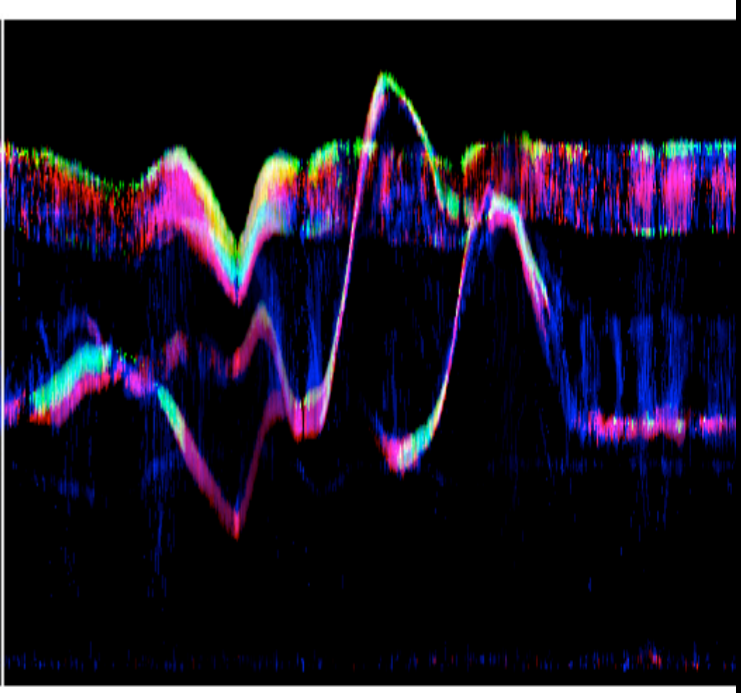
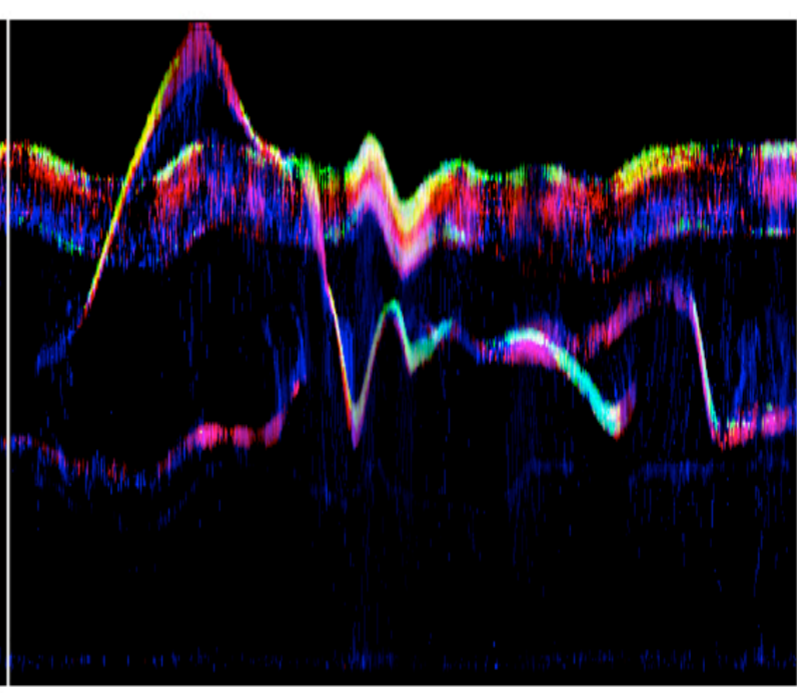
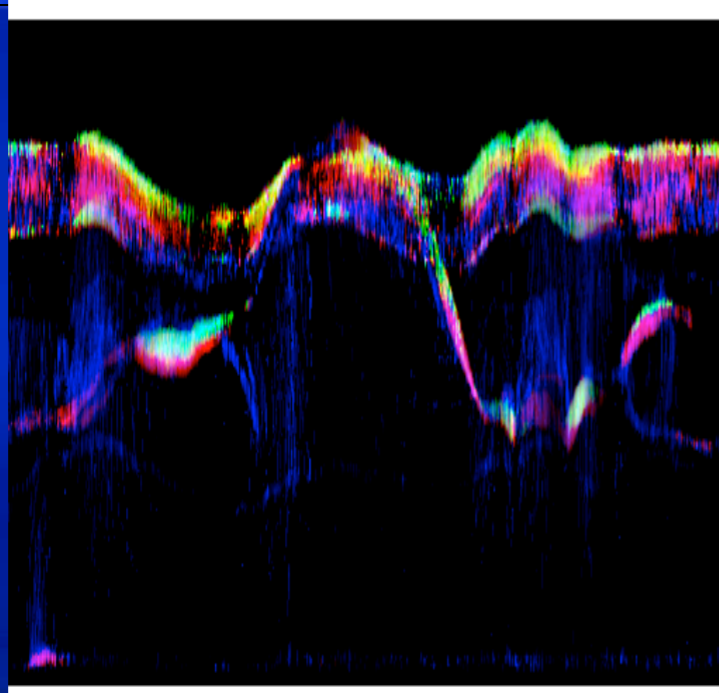
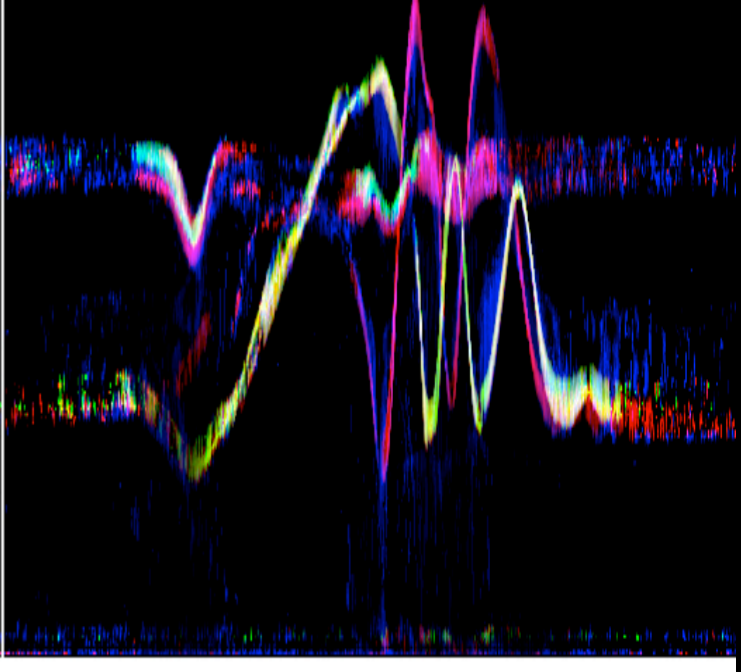
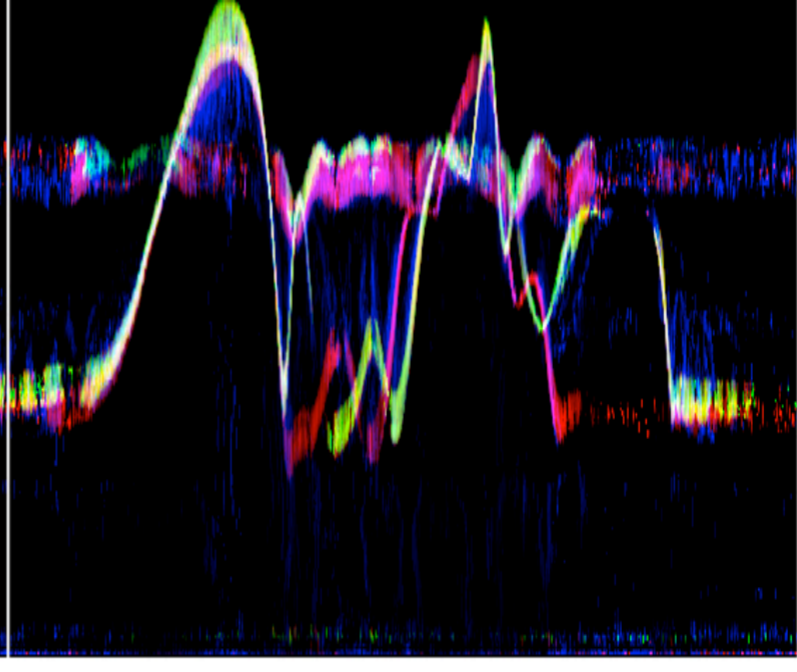
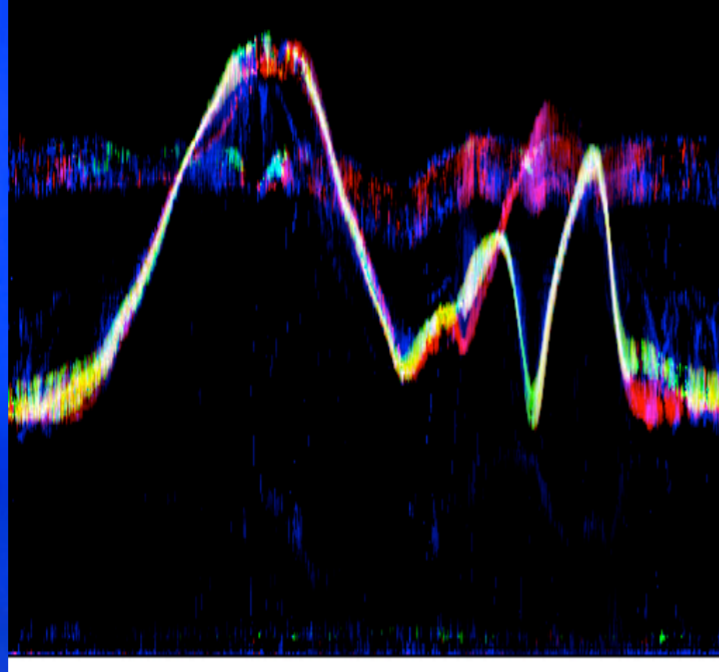


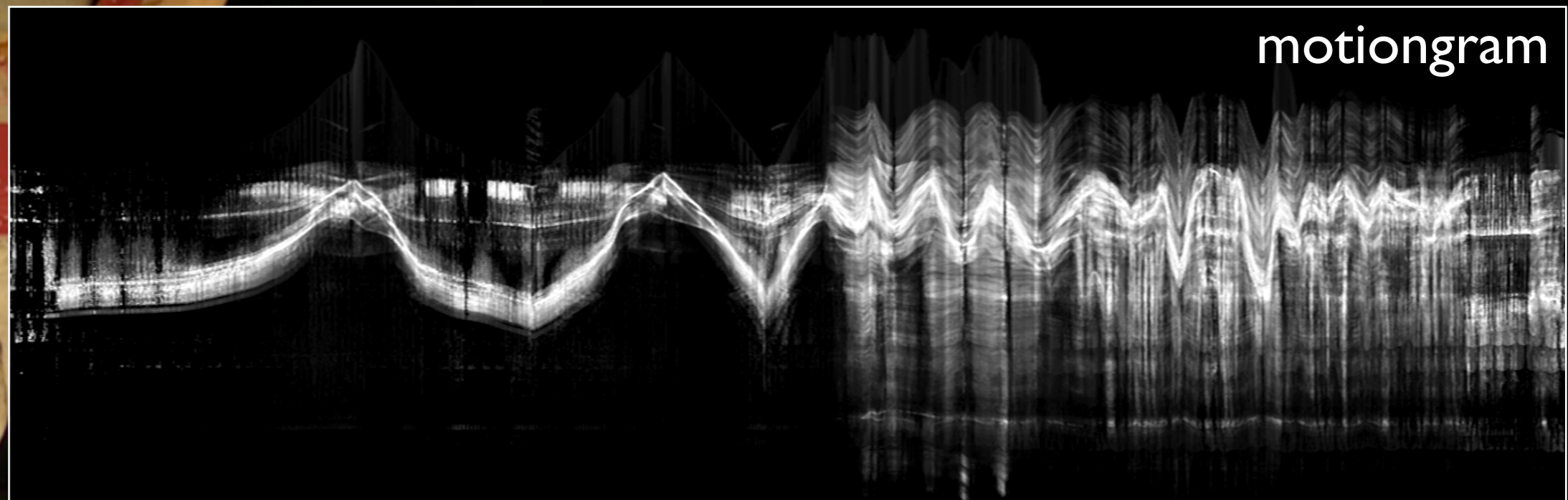
5 min

Bevegelseskurve

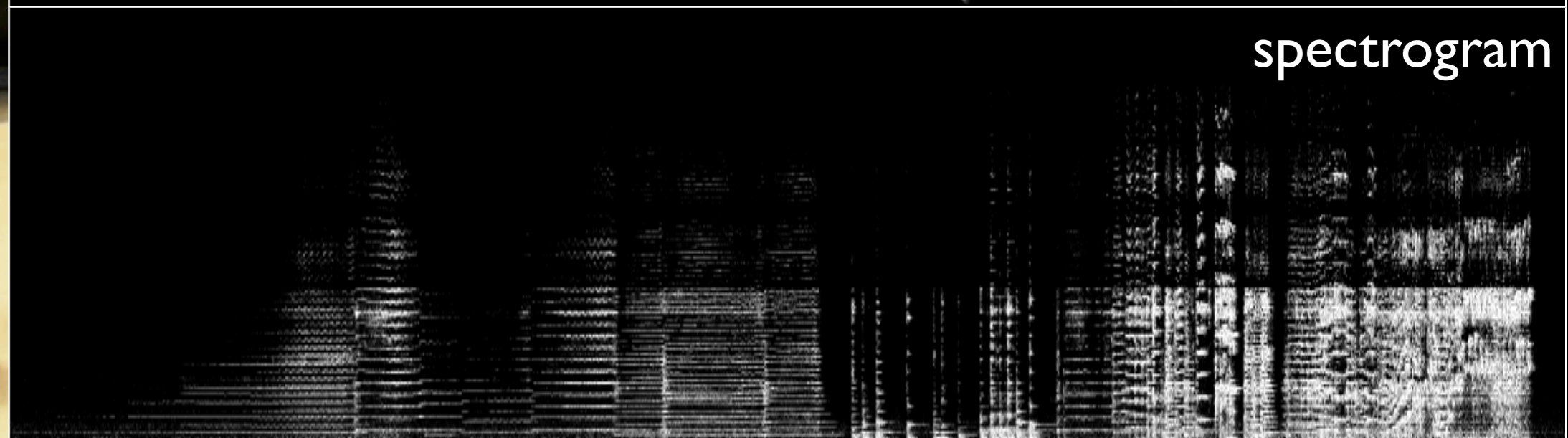


40 sek

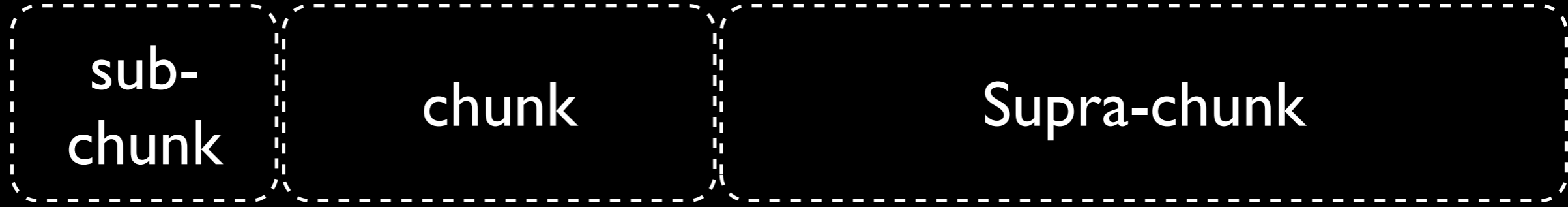




motiongram



spectrogram



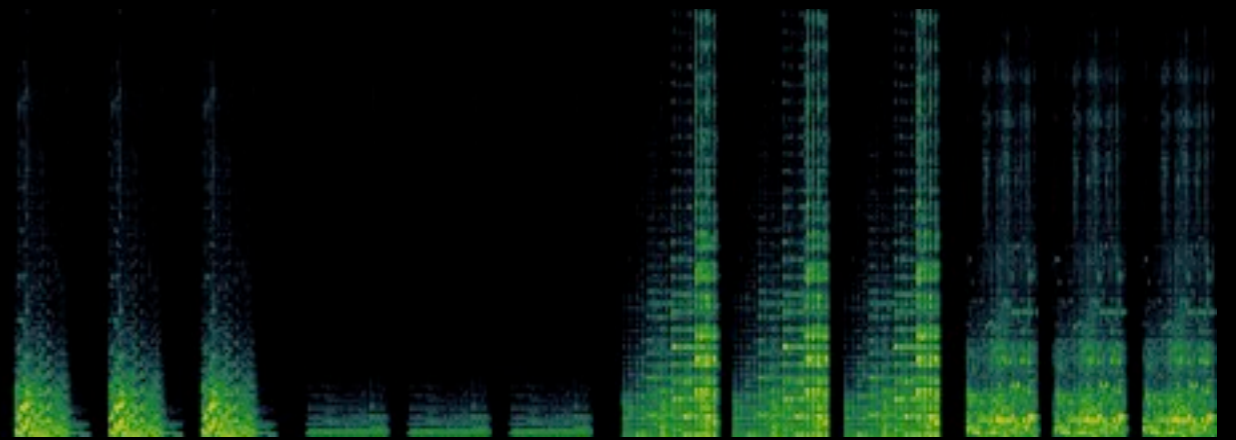
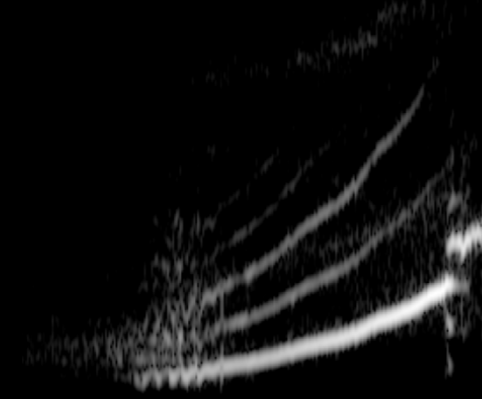
0

~1s

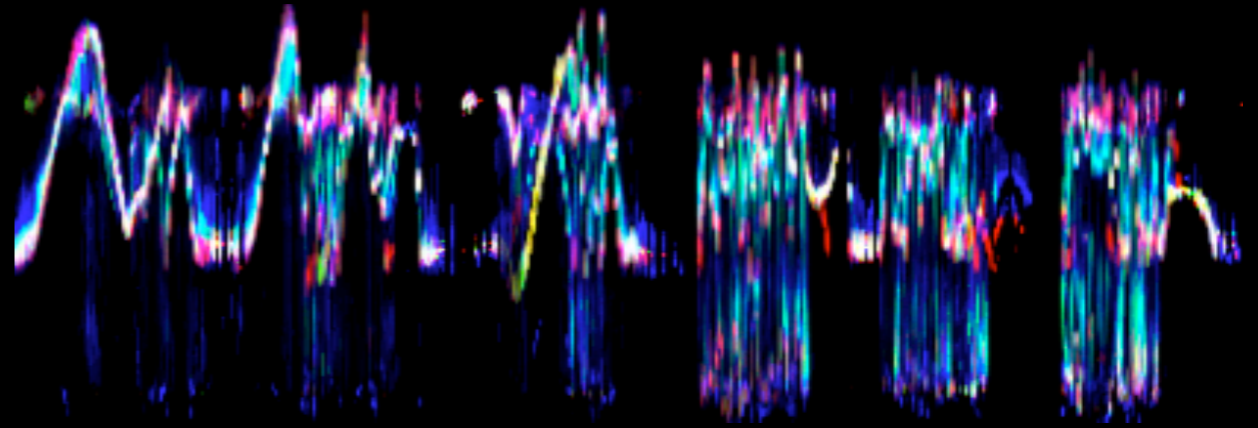
~5s

minutter

Audio



Video



Bevegelses-
bilde

Bevegelses-
historiebilde

Bevegelseskurve

Analyse

Kvalitativ - Kvantitativ

1. Generell
2. Deskriptiv
3. Funksjonell
4. Bevegelse-lyd

Generell

Beskriv de globale egenskapene ved studieobjektet

Hva studerer du?

Hvem spiller?

Hvor og når spiller de?

Er det en konsert, video, film?

Deskriptiv

Trekk ut bilder fra videostrømmen og beskriv hva du ser

Hvordan er kameraplasseringen? Nær, medium, fjern

Hvem er i bildet? Enkeltpusiker, band, etc.

Hvor i bildet skjer det noe interessant? høyre, venstre...

Hva er interessant?

Funksjonell

Forklar hvilken funksjon hendelsene du har valgt ut har

Lydproduserende
Støttebevegelser
Kommunikative

Lydproduserende
modifikasjon

kommunikative
utøver-utøver

støtte:



frasering

hjelp

tiltrekning

eksitasjon

utøver-publikum

Lydakkompagnerende
rytmiske, miming, emotive, ...

Bevegelse-lyd

Hvilken relasjon er det mellom bevegelsene og lyden?

Horisontalt (melodi, rytme)

Vertikalt (harmoni, klangfarge, tekstur)

Rytmask

1. Generell
2. Deskriptiv
3. Funksjonell
4. Bevegelse-lyd

Annotering

Anvil

The screenshot displays the Anvil software interface, which is used for gesture annotation in video. It is divided into several main sections:

- Top Left (Debug Console):** Contains a menu (File, Edit, Spec, View, Debug) and a text area with the following log:


```




      DEBUG MODE IS ON
      open file lq1-kara.anvil
      closing annotation
      read anvil file: anvil.Annotation@34263a
      create player for: video.quicktime:
      FrameRate = 0.0
      Movie duration: 02:27:28
      No. of frames: 3681
      open player (first)
      creating annotation window
      
```

 Below the log, it shows: Frame number: 458, Media time: 00:10:31, Modified: true.
- Top Center (Video Player):** A video window titled 'LOI-KARIM.MOV' showing a scene with three men. A vertical timeline on the left of the video ranges from 0 to 100. Below the video are navigation controls (play, stop, previous, next, full screen, zoom).
- Top Right (Annotation Properties):** A panel for the selected track 'gesture.metaphoric'. It shows:
 - Track: gesture.metaphoric
 - Start: 00:10:23
 - End: 00:10:47
 - Attributes: phase: stroke, location-height: chest, location-side: outer-right, handedness: right.
 - Comment: copy gesture, -> elaboration.
 - Buttons: start, edit, end, unlink, <-link, del.
- Bottom (Timeline):** A detailed timeline for the video segment from 15 to 24 seconds. It includes:
 - Text (tr):** d [brea das der Erzähler d Ich-Erzäh... Schl verb es g a a ande Geschi [brea Liebesgeschi zwisc [breath] einer Jüdin
 - Posture (posture):**
 - head: [ra] [lower]
 - upper: [low] [f] [to]
 - best: [pink] [lower] [19]
 - Gesture (gesture):**
 - beat: [orange] [yellow] [red] [yellow] [red] [green] [yellow] [pink]
 - deictic
 - emblem
 - iconic
 - metaphoric: [yellow] [red] [green] [yellow] [red] [green]
 - Adaptive (adaptive):** [purple]

Tidslinje i regneark



A9 =

| | A | B | C | D | E | F |
|----|---------------------------------|---|--|---|---|--|
| 1 | Analyse av min DVD | | | | | |
| 2 | Alexander Refsum Jensenius | | | | | |
| 3 | | | | | | |
| 4 | Generell | | | | | |
| 5 | Artist: Sting | | | | | |
| 6 | Kilde: Bring on the night (DVD) | | | | | |
| 7 | År: 1985 | | | | | |
| 8 | | | | | | |
| 9 | |  |  | | |  |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
| 18 | Tid | 00:01:00 | | 00:01:01 | | 00:02:37 |
| 19 | Deskriptiv | | | | | |
| 20 | <u>Kameraposisjon</u> | <u>Detalj</u> | | <u>Detalj</u> | | <u>Oversikt</u> |
| 21 | <u>Hvem</u> | Sting | | Sting | | Band |
| 22 | <u>Hvor</u> | <u>Senter</u> | | <u>Senter</u> | | <u>Senter</u> |
| 23 | <u>Utøver</u> | <u>Beveger hånden over gitaren</u> | | <u>Sting lukker øynene og synger i mikrofonen</u> | | <u>Sting ser mot publikum</u> |
| 24 | Funksjonell | | | | | |
| 25 | <u>Lydproduksjon</u> | <u>Plekter mot streng</u> | | <u>Stemme</u> | | |
| 26 | <u>Støttebevegelser</u> | <u>Lener seg bakover</u> | | | | <u>Beveger benet rytmisk</u> |
| 27 | <u>Kommunikativ</u> | <u>Sliter med å skape tonen</u> | | <u>Uttrykker emosjon</u> | | <u>Ser mot publikum</u> |
| 28 | Bevegelse-lyd | | | | | |
| 29 | <u>Melodi</u> | | | <u>Presser stemmen i høyt register</u> | | |
| 30 | <u>Rytme</u> | | | | | <u>Beveger benet rytmisk</u> |
| 31 | <u>Klangfarge, tekstur</u> | | | | | |

OSX:

shift-eple-3 = hele skjermen

shift-eple-4 = velg del av skjermen

klipp ut bilde

Windows:

“prnt scrn” = print screen

Source: DEFAULTNTSC_SCN

Title: 1 - 00h59m29s Angle: 1 Chapters: 3 through 3 Duration: 00:08:38

Destination

File: /Users/alexanje/Desktop/min-video.mp4 Browse...

Output Settings: Normal (Default)

Format: MP4 file Large file size Web optimized iPod 5G support

Video Audio Subtitles Advanced

Video Codec: H.264 (x264) Quality: Target size (MB)
Framerate (FPS): Same as source Average bitrate
 2-pass encoding Constant quality

Picture Size: Source: 720x480, Output: 704x480, Anamorphic: 625x480 Strict
Picture Cropping: Auto 0/0/10/6

Video Filters:

Encoding: pass 1 of 1, 34.45 % (27.95 fps, avg 32.55 fps, ETA 00h05m13s)

Stop Pause

0 encode(s) pending
Encoding: pass 1 of 1, 34.45 % (27.95 fps, avg 32.55 fps, ETA 00h05m13s)

▶ DEFAULTNTSC_SCN (Title 1, Chapter 3, 1 Video Pass) -> min-video.mp4 ✕

- ▼ Apple
 - Universal
 - iPod
 - iPhone & iPod Touch
 - AppleTV
- ▼ Regular
 - Normal
 - High Profile
- ▶ Legacy
 - JVC Everio
 - svensk
 - DVD

Encoding: pass 1 of 1, 34.45 % (27.95 fps, avg 32.55 fps, ETA 00h05m13s)

saveyoutube.com


Evolution of Dance | KickYouTube

http://kickyoutube.com/#dMH0bHeiRNg

KickYouTube

MP4 FLV HD AVI MPG 3GP IPHONE PSP

Evolution of Dance

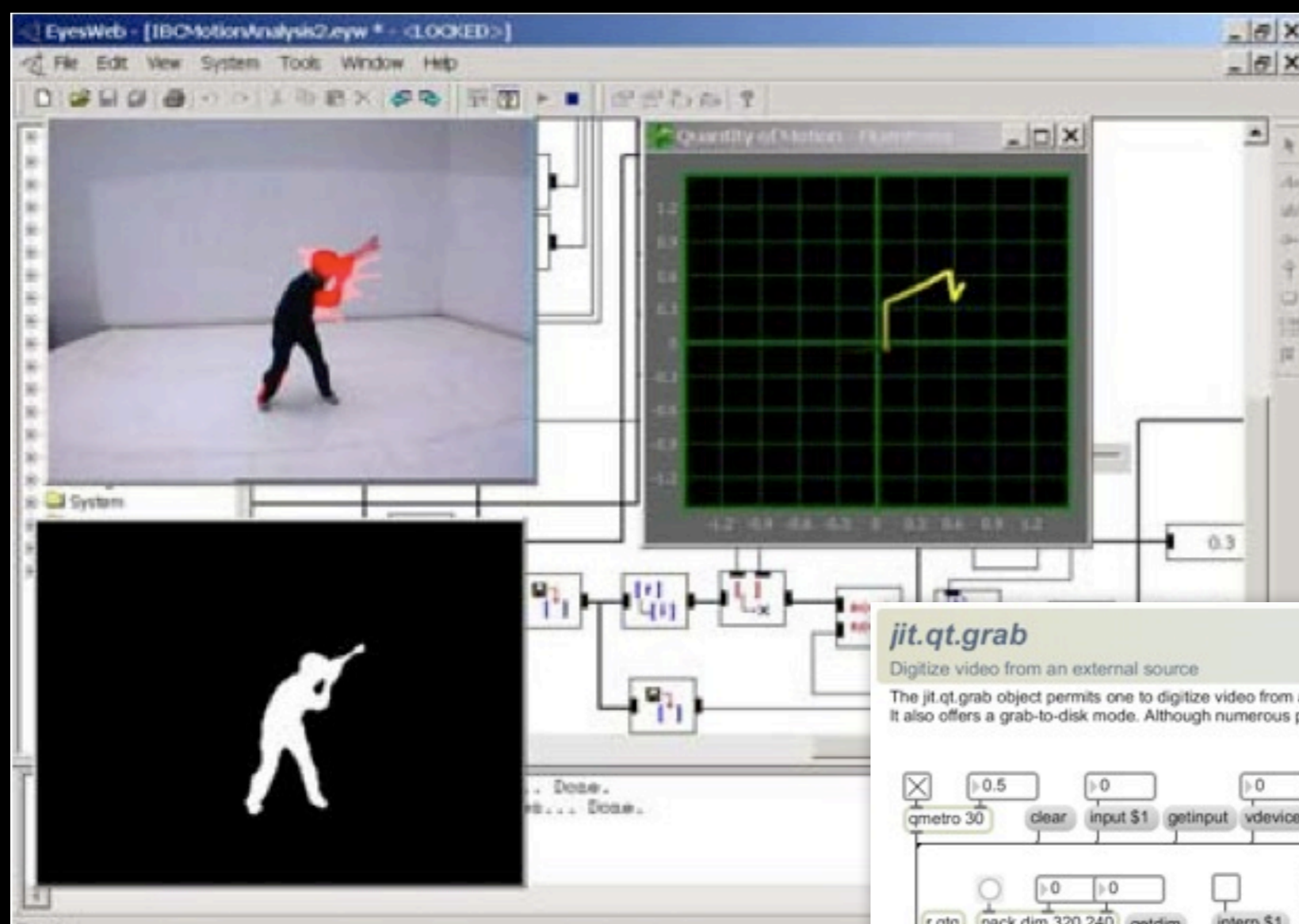


0:17 / 6:00

Views: 135739523

Embed: `<div style="width:450px">`

YT KICK



Max/MSP/Jitter

EyesWeb

jit.qt.grab

Digitize video from an external source

The jit.qt.grab object permits one to digitize video from any QuickTime-compatible video digitizer, and decompress the signal into a Jitter matrix. It also offers a grab-to-disk mode. Although numerous parameters for control are offered, not all features are supported by all digitizers.

[open jit.qt.grab reference](#)

0: preview mode;
1: vdig mode;
2: record mode;

codequality \$1
codequality; only active in vmode 2; 0 = min; 1 = low; 2 = normal; 3 = high; 4 = max (def.); 5 = lossless; can be specified with an int or a symbol.

qmetro 30 clear input \$1 getinput vdevice \$1 getvdevice vmode \$1 getvmode p vmode? min

r qtg pack dim 320 240 getdim interp \$1 usesrrect \$1 usedstrect \$1 pak srrect 0 0 320 240

jit.qt.grab 320 240 arguments <width> <height> <vdevice(optional)>

route vdevlist inputlist
iter
prepend append t clear
vdevice \$1

iter
prepend append t clear
input \$1

p other
print

open close
open opens the grab component / close closes it. YOU MUST EXPLICITLY OPEN THE GRAB COMPONENT IN ORDER TO USE IT.

getvdevlist getinputlist
use 'getvdevlist' and 'getinputlist' to generate lists of available devices and device inputs. In this patch, the lists fill the menus to the left.

exportimage jpeg exportimage <name(optional)> <file type(def=png)> <1(optional = force settings dialog)>

available file types: png, bmp, jpeg, macpaint, photoshop, pict, qtimage, sgi, tga and tiff

settings open the video settings dialog
snd_settings open the sound settings dialog

control hue, saturation, brightness etc.
p image_controls
adjust the sound configuration for grab
p sound_controls
grab direct to disk file
p grab-to-disk
grab direct to window (currently Mac only)
p directwindow
advanced camera features (Mac OSX only)
p iidc_support
p DFG/1394-1_support

WINDOWS USERS: jit.qt.grab requires the use of a 3rd party vdig. We recommend either WinVDIG (free) or the Abstract Plane VDiG:
go to WinVDIG go to Abstract Plane
or use jit.dx.grab which uses DirectX.

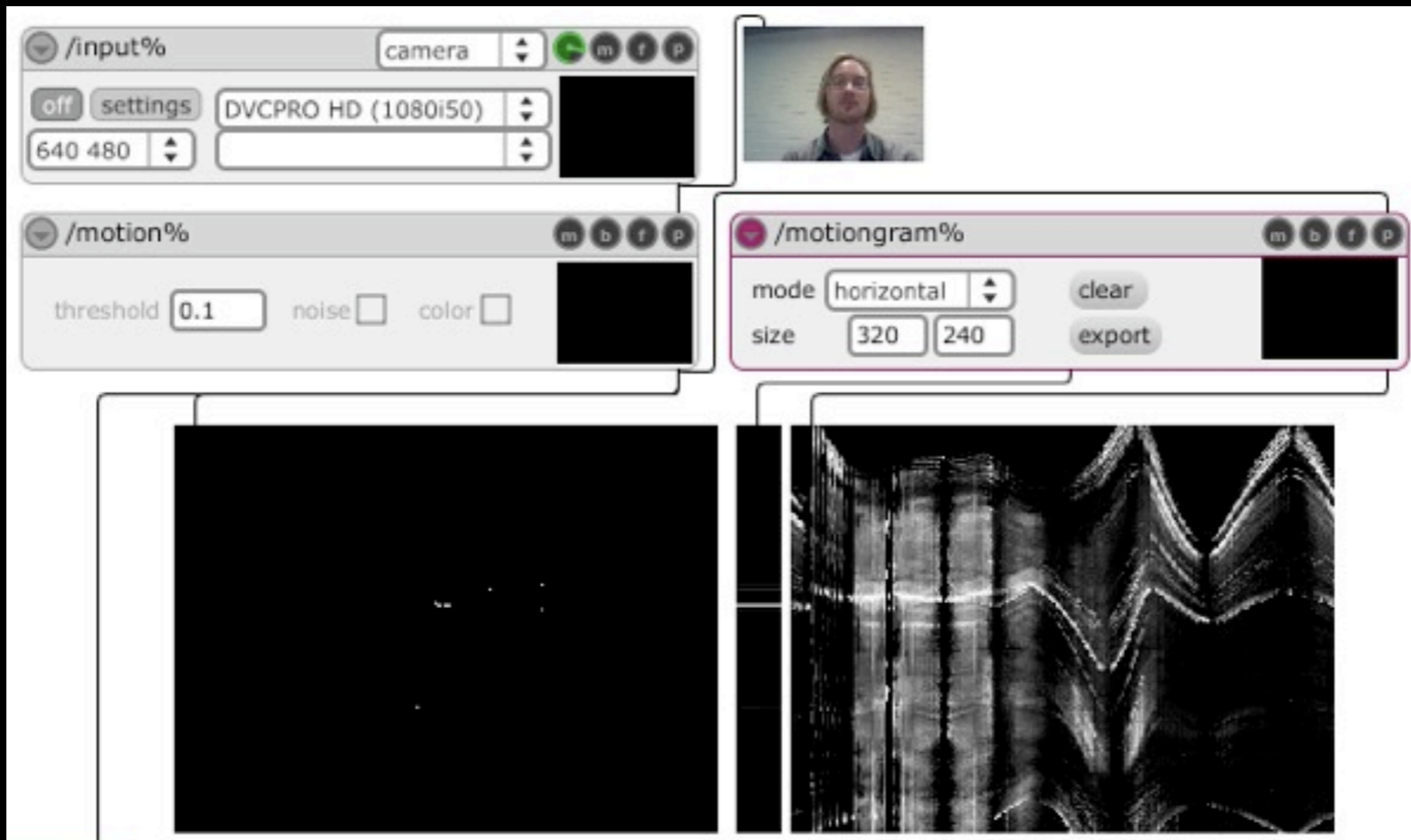
GENERAL NOTE: you should perform a full install of QuickTime prior to using Jitter's jit.qt set of objects.

supports: 4 plane char.

See Also:
Objects:

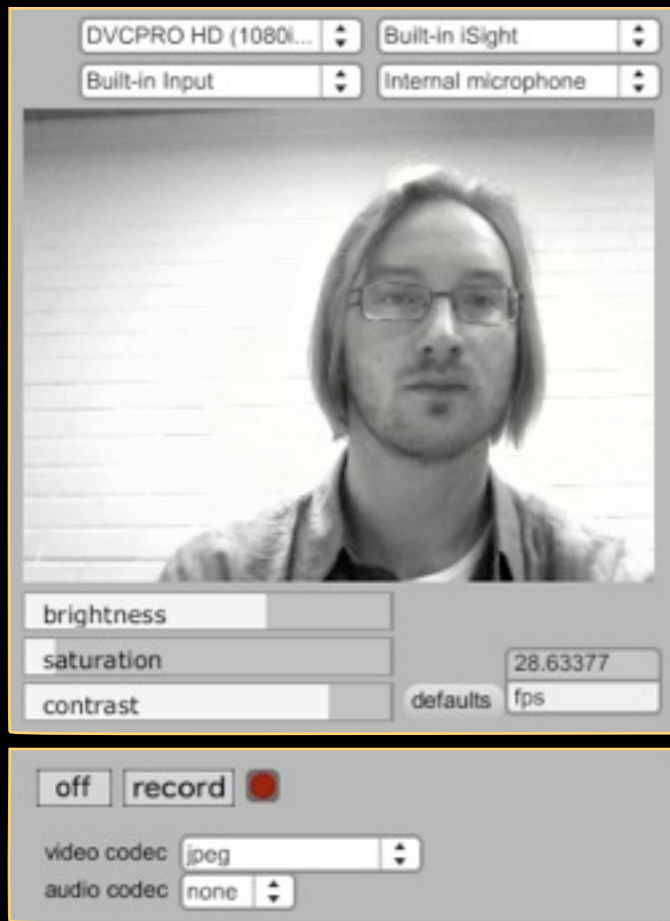
33.33387
fps

Musical Gestures Toolbox

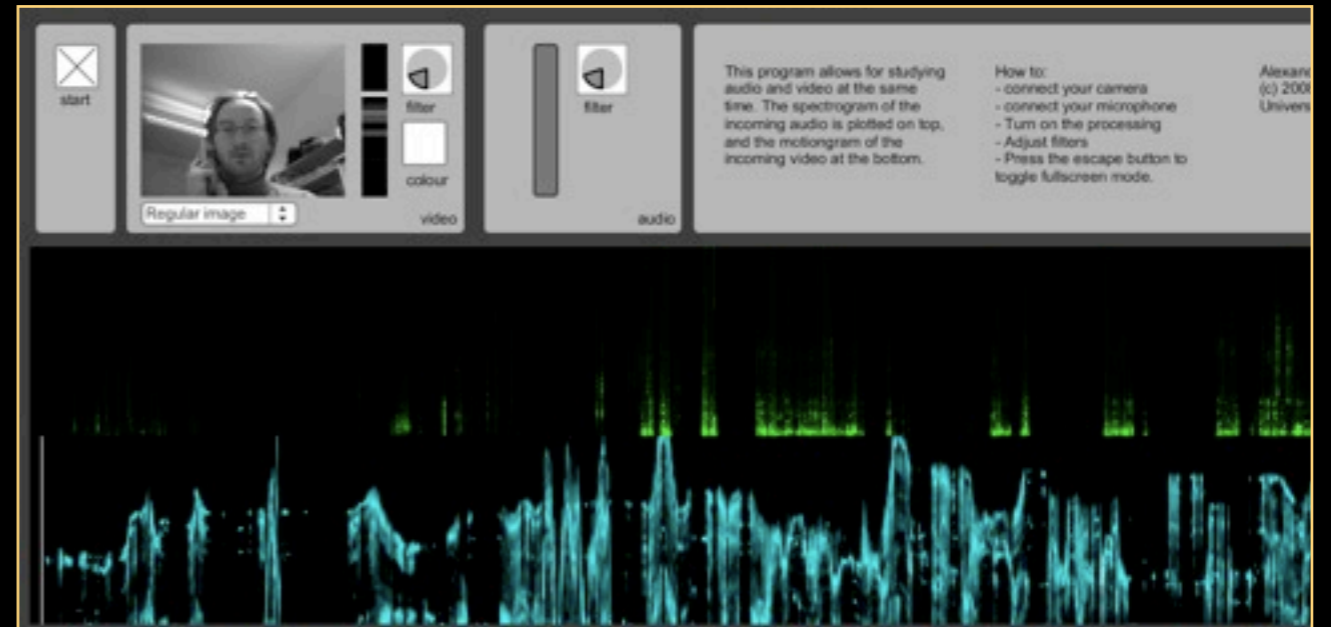


Max/MSP/Jitter

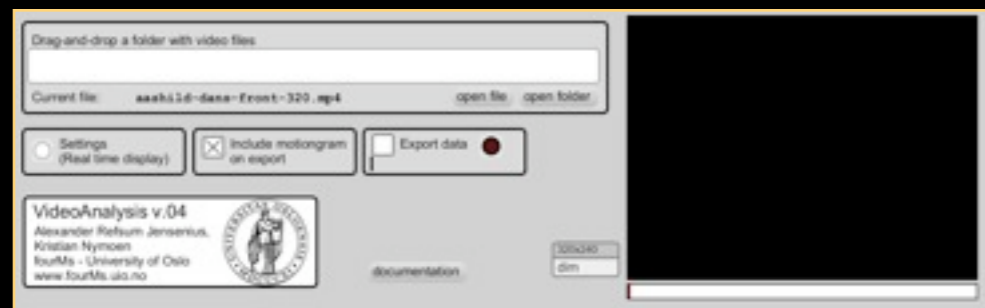
Jamoma



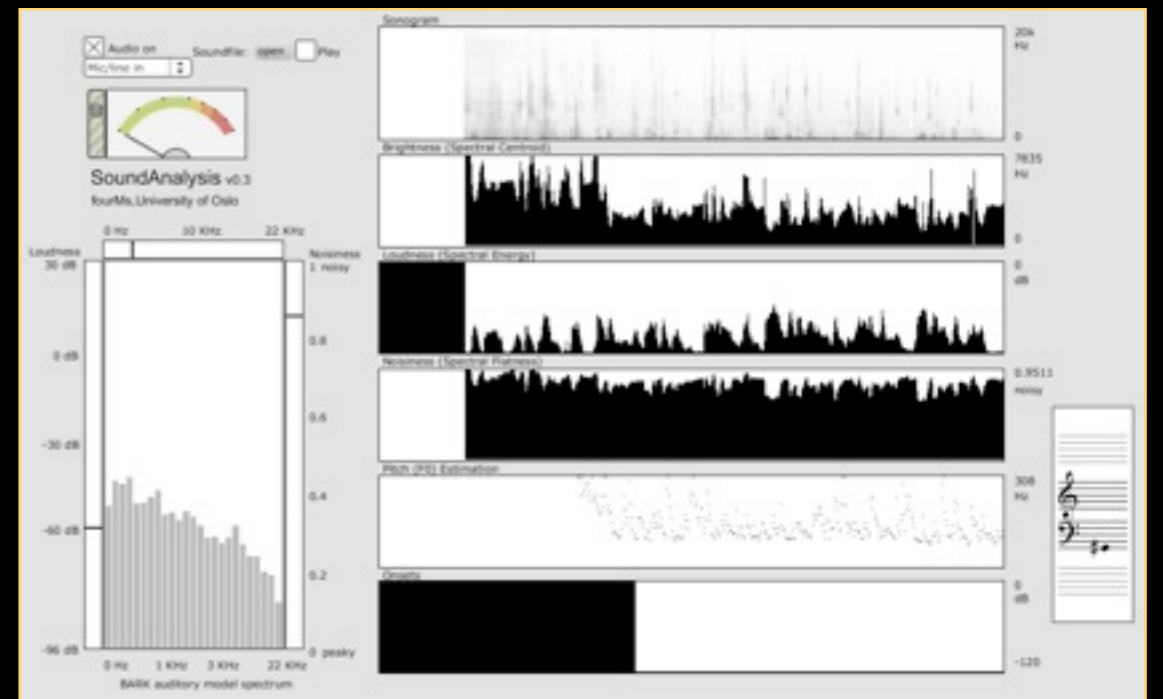
AudioVideoRecorder



AudioVideoAnalysis

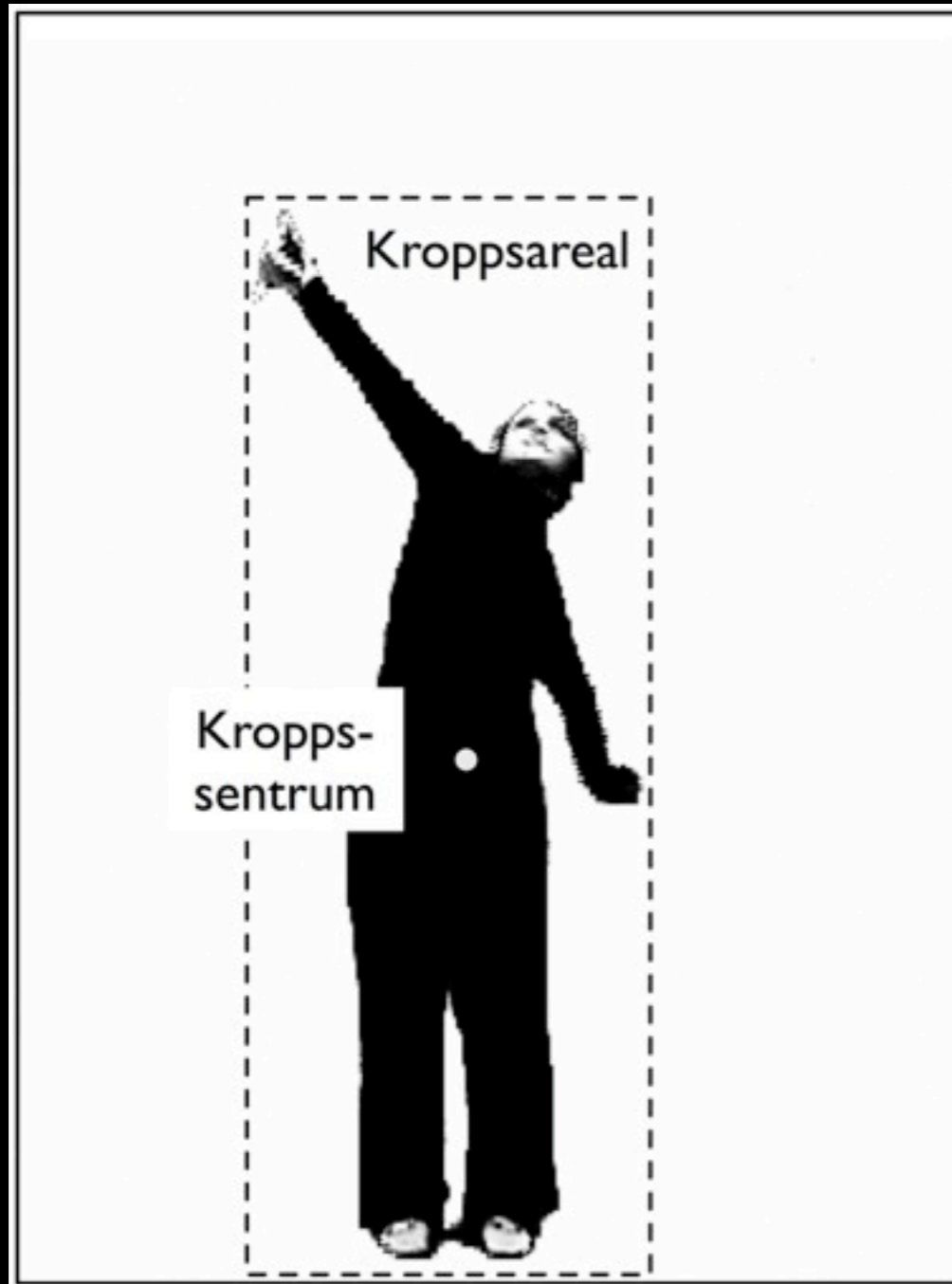


VideoAnalysis

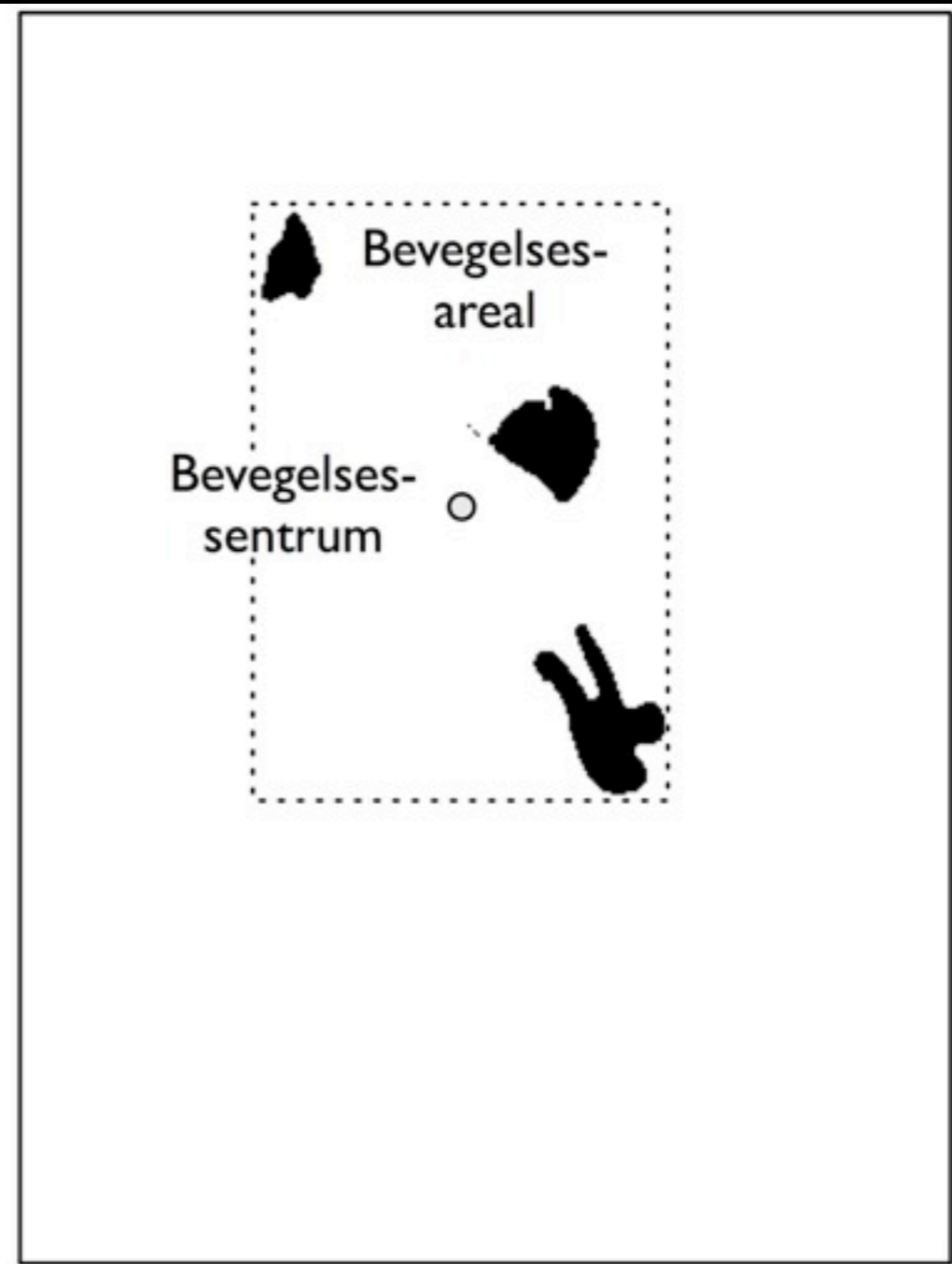


SoundAnalysis

Tall



Kroppsmengde



Bevegelsesmengde

