Using MOTIONGRAMS in the Study of Musical Gestures

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Motiongrams of a five minute video of free dance movements to music. The dancers moved to five different musical excerpts (a-e) and each excerpt was repeated three times (1-3).

USING MOTIONGRAMS
Motiongrams allow for quick navigation in video material and for comparative analysis of motion qualities.

Although quite rough, it is easy to see differences in the quantity of motion and similarities in upward/downward patterns between motion sequences. The images to the left and above show a five minute dance improvisation, and below is the first 40 seconds of the same sequence. Notice how it is possible to follow the trajectories of the hands (because of the yellow and red gloves) and head (pink due to saturation), as well as the body (appears blue due to the background).

FUTURE WORK
- 3D motiongrams showing both horizontal and vertical motion.
- Combined displays with audio, video and sensor information.
- Improve efficiency.

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http://musicalgestures.uio.no