

Sofia Dahl

Publications

Copenhagen, November 20, 2010

Articles in refereed scientific journals

Petrini, K., **Dahl, S.**, Rocchesso, D., Waadeland, C. H., Avanzini, F., Puce, A. and Pollick, F. E. (2009). Multisensory integration of drumming actions: musical expertise affects perceived audiovisual asynchrony. *Experimental Brain Research*, 198(2-3):339–352.

Huron, D., **Dahl, S.** and Johnson, R. (2009). Facial expression and vocal pitch height: Evidence of an intermodal association. *Empirical Musicology Review*, 4(3):93–100.

Dahl, S. and Friberg, A. (2007). Visual perception of expressiveness in musicians' body movements. *Music Perception*, 24(5):433–454.

Dahl, S. (2004). Playing the accent - comparing striking velocity and timing in an ostinato rhythm performed by four drummers. *Acta Acustica united with Acustica*, 90(4):762–776.

Dahl, S. and Granqvist, S. (2003). Estimating Internal Drift and Just Noticeable Difference in perception of continuous tempo drift. *The Neurosciences and Music, Annals of the New York Academy of Science*, 999:161–165.

Dahl, S. (2000). The playing of an accent - preliminary observations from temporal and kinematic analysis of percussionists. *Journal of New Music Research*, 29(3):225–233.

Monographies / Thesis

Dahl, S. (2005). *On the beat: Human movement and timing in the production and perception of music*. Published doctoral thesis, KTH, Royal Institute of Technology, Stockholm, Sweden. ISBN 91-7178-134-X, TRITA-TMH 2005:5.

Dahl, S. (2003). *Striking movements: Movement strategies and expression in percussive playing*. Published licentiate thesis, KTH, Royal Institute of Technology, Stockholm, Sweden. ISBN 91-7283-480-3, TRITA-TMH 2003:3.

Articles in refereed and edited scientific volumes and conference proceedings

Book Chapters

Dahl, S., Bevilacqua, F., Bresin, R., Clayton, M., Leante, L., Poggi, I. and Rasamimanana, N (2009). Gestures in performance. In Leman, M. and Godøy, R. I., editors, *Musical Gestures. Sound, Movement, and meaning*, pages 36–68. Routledge.

Dahl, S. (2006). Movements and analysis of drumming. In Altenmüller, E., Wiesendanger, M., and Kesselring, J., editors, *Music, Motor Control and the Brain*, pages 125–138. Oxford University Press, New York.

Bresin, R. and **Dahl, S.** (2003). Experiments on gestures: walking, running, and hitting. In Rocchesso, D. and Fontana, F., editors, *The sounding object.*, pages 111–136. Mondo Estremo, Florence, Italy.

Bresin, R., Falkenberg Hansen, K., **Dahl, S.**, Marshall, M., and Moynihan, B. (2003). Devices for manipulation and control of sounding objects: The Vodhran and the Invisiball. In Rocchesso, D. and Fontana, F., editors, *The sounding object.*, pages 271–296. Mondo Estremo, Florence, Italy.

Conference Proceedings

Dahl, S. and Huron, D. (2007). The influence of body morphology on preferred dance tempos. In *Proceedings of the International Computer Music Conference*, volume 2, pages 1–4. International Computer Music Association.

Dahl, S. and Friberg, A. (2004). Expressiveness of musician's body movements in performances on marimba. In Camurri, A. and Volpe, G., editors, *Gesture-based Communication in Human-Computer Interaction*, volume 2915 of *Lecture Notes in Artificial Intelligence*, pages 479–486. Springer Verlag.

Rinman, M.-L., Friberg, A., Bendiksen, B., Cirotteau, D., **Dahl, S.**, Kjellmo, I., Mazarino, B., and Camurri, A. (2004). Ghost in the Cave - An interactive collaborative game using non-verbal communication. In Camurri, A. and Volpe, G., editors, *Gesture-based Communication in Human-Computer Interaction*, volume 2915 of *Lecture Notes in Artificial Intelligence*, pages 549–556. Springer Verlag.

Dahl, S. and Friberg, A. (2003). What can body movements reveal about a musician's emotional intention? In Bresin, R., editor, *Proceedings of Stockholm Music Acoustic Conference 2003*, volume II, pages 599–602, Stockholm, Sweden.

Dahl, S. and Granqvist, S. (2003). Looking at perception of continuous tempo drift - a new method for estimating Internal Drift and Just Noticeable Difference. In Bresin, R., editor, *Proceedings of Stockholm Music Acoustic Conference (SMAC03), 6-9 August 2003*, volume II, pages 595–598, Stockholm, Sweden.

Bresin, R., **Dahl, S.**, Rath, M., Marshall, M., and Moynihan, B. (2003). Controlling the virtual bodhran - the vodhran. In Bresin, R., editor, *Proceedings of Stockholm Music Acoustic Conference (SMAC03), 6-9 August 2003*, volume II, pages 685–688, Stockholm, Sweden.

Bresin, R., Hansen, K. F., and **Dahl, S.** (2003). The Radio Baton as a configurable musical instrument and controller. In Bresin, R., editor, *Proceedings of Stockholm Music Acoustic Conference (SMAC03), 6-9 August 2003*, volume II, pages 689–692, Stockholm, Sweden.

Rinman, M.-L., Friberg, A., Kjellmo, I., Camurri, A., Cirotteau, D., **Dahl, S.**, Mazarino, B., Bendiksen, B., and McCarthy, H. (2003). ESP- an interactive collaborative game using non-verbal communication. In Bresin, R., editor, *Proceedings of Stockholm Music Acoustic Conference (SMAC03), 6-9 August 2003*, volume II, pages 561–564, Stockholm, Sweden.

Dahl, S. and Bresin, R. (2001). Is the player more influenced by the auditory than the tactile feedback from the instrument? In Fernström, M., Brazil, E., and Marshall, M., editors, *Proceedings of the Cost-G6 Conference Digital Audio Effects, (DAFx01), 6-8 December 2001*, pages 194–19, Limerick, Ireland.

Bresin, R., Friberg, A., and **Dahl, S.** (2001). Toward a new model for sound control. In Fernström, M., Brazil, E., and Marshall, M., editors, *Proceedings of the Cost-G6 Conference Digital Audio Effects, (DAFx01), 6–8 December 2001*, pages 45–49, Limerick, Ireland.

Dahl, S. (2001). Arm motion and striking force in drumming. In Gerber, H. and Müller, R., editors, *Proceedings of XVIIIth congress of the International Society of Biomechanics, 8–13 July 2001, (CD-ROM)*, Zürich, Switzerland.

Dahl, S. (2001). Arm motion and striking force in drumming. In Bonsi, D., Gonzalez, D., and Stanzial, D., editors, *Proceedings of the International Symposium on Musical Acoustics, Musical Sounds from Past Millennia, 10-14 September 2001*, volume 1, pages 293–296, Perugia, Italy.

Dahl, S. and Stokes, V. P. (1999). Measurement of arm motion, timing and striking force in a simple drumming task. In *Journal of the Acoustical Society of America*,

volume 105, page 1328. Acoustical Society of America.

Other scholarly publications

Invited Conference Proceedings

Dahl, S. and Altenmüller, E. (2008) Motor control in drumming: Influence of movement pattern on contact force and sound characteristics. In Proceedings of the *Acoustics'08 Paris*, Joint meeting Acoustical Society of America, ASA, the European Acoustics Association, EAA, and the Société Française d'Acoustique, SFA. Paris, France.

Dahl, S. (2006). Production and perception of gestures in music performance. In Gritten, A. and King, E. (Eds.), *Proceedings of the Second International Conference on Music and Gesture*, 20–23 July 2006 Royal Northern College of Music, Manchester, UK, pp.59-64 (CD-ROM).

Publications in Quarterly Progress and Status Reports KTH, Dept. of Speech, Music and Hearing

Dahl, S. and Friberg, A. (2004). Expressiveness of a marimba player's body movements. *Speech Music and Hearing Quarterly Progress and Status Report*, 46(1):75-86. KTH, Dept. of Speech, Music and Hearing, Royal Institute of Technology, Stockholm.

Dahl, S., Granqvist, S., and Thomasson, M. (2000). Detection of drift in tempo. *Speech Music and Hearing Quarterly Progress and Status Report*, 41(4):19-28. KTH, Dept. of Speech, Music and Hearing, Royal Institute of Technology, Stockholm.

Dahl, S. (1998). Timing in drumming – some preliminary results. *Speech Music and Hearing Quarterly Progress and Status Report*, 39(4):95-102. KTH, Dept. of Speech, Music and Hearing, Royal Institute of Technology, Stockholm.

Dahl, S. (1997). Measurements of the motion of the hand and drumstick in a drumming sequence with interleaved accented strokes - a pilot study. *Speech Music and Hearing Quarterly Progress and Status Report*, 38(4):1-6. KTH, Royal Institute of Technology, Stockholm.

Dahl, S. (1997). Spectral changes in the tom-tom related to striking force. *Speech Music and Hearing Quarterly Progress and Status Report*, 38(1):59-65. KTH, Royal Institute of Technology, Stockholm.

Essay

Dahl, S. (1996). *Kvinnor och slagverk* (Women and percussion). Essay in Musicology. Stockholm University, Stockholm, Sweden.

Research-related popularized articles and TV programmes

Popularized articles

2008 **Dahl, S.** and Altenmüller, E. *Movements and grip influence the contact force and sound in drumming*. Acoustical Society of America ASA/EAA/SFA '08 Meeting Lay Language Papers.

1999 **Dahl, S.** and Stokes, V. P. *Measurement of Arm Motion, Timing and Striking Force in a Simple Drumming Task* (Popular version of paper 5aMUa5), Acoustical Society of America ASA/EAA/DAGA '99 Meeting Lay Language Papers.

TV interviews

2008 Interviewed in Mariani Foundation's promotional video for Neuroscience and Music, March 28, 2008.

Interview in German Television, ARD Morgenmagazin, February 4, 2008.

2003 Appearance in Swedish National Television (SVT) ABC nytt. The game Ghost in the Cave was presented. October 26, 2003.

2002 Interview in Swedish National Television (Utbildningsradion) Jorden är platt. Educational program broadcasted during the autumn 2002.

Popular workshops and talks

2007, May 16 Open drummers' workshop at Tonskóli, Neskaupstaður, Iceland.

2007, Oct 31 Tag der offenen Tür: "Was bewegt Musiker? Warum es interessant ist, Musikerbewegungen zu untersuchen." Open house talk at Institute for Music physiology and Musicians' Medicine, Hanover, Germany.