

Abstract for Circle 8, NSU Summer 2017

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Title: **Musical wargames - building cognitive survival skills through mediated improvisation**

Format: performance + presentation + discussion

Duration: 40 mins (10 mins performance, 15 mins talk, 15 mins discussion)

Abstract:

To be able to solve unexpected problems quickly – through improvisation – is a valuable survival skill. Such skills are also utilized in aesthetic contexts, such as musical improvisation, where the unpredictable unfolding of ideas and the efforts dealing with them, and (if several musicians are involved) the observed interactions between musicians, are perceived and appreciated empathetically, through the mirror neuron system. From a performers point of view, the ability to "survive" in such a difficult musical situation is something that definitely can be trained. Given big ears and eyes, and appropriately trained cognitive models of the world we act in, and of the counter-actors, we increase our survival chances. Hence, improvisation is like life. There is no script, only different modes of interaction. If you are not ready to interact on stage, but hold your firm, predetermined views, you will very quickly be deemed uninteresting on stage, because there is no interaction. If you are not ready to interact in life, you will, in the same way, not survive for long.

An improvisation can be seen as creative navigation in an ever-changing space of possibilities. The topology of this space is highly complex, containing discontinuities, phase transitions, and singularities. In my practiced-based research, I have over a number of years experimented with tools for navigating such spaces, by improvising on carefully designed unstable chaotic generative music systems. From this a number of strategies have emerged, to deal with upcoming situations. The naive approach is the good old trial and error, but it can be refined into performance patterns such as probe and react, find and rest, explore and contemplate (what you have before you lose it). Or ponder and vary, discover and exploit, or possibly even: go to the limit and jump ship.

There are plenty of war and battle metaphors in music: Duels, game pieces, piano battles, etc. There are also musical metaphors in war, and both could be said to rely on game-based interaction. Within management, decision-making and organizational research, there is extensive literature on improvisation, often using musical metaphors. Based on this, I ask the following question:

- Can the actual practice of technology-mediated musical improvisation, in carefully designed sandbox environments full of unpredictability and chaos, provide effective training for survival in a hostile, ever-changing future environment?

My presentation will also include experiences from two significant and valuable confrontations between these ideas and people in the real international decision-making and crisis management sphere.

**Palle Dahlstedt** (Sweden, b.1971): Composer, improviser, pianist and researcher. He grew up in Stockholm, studied instrumental and electronic composition at the academies of Malmö and Gothenburg, and took a PhD in evolutionary computation applied to artistic creativity at Chalmers University of Technology (2004). His music, ranging from piano solos over orchestra to interactive software installations, has been performed on six continents, and been awarded several international prizes (e.g., Gaudeamus Prize 2001). In his research he develops new technologies for electronic improvisation and composition, and studies computer models of artistic creativity. He is trained as a classical pianist, and has toured extensively as an improviser on electronics and/or keyboard instruments, primarily with his duo pantoMorf, but also in other constellations, e.g., together with John Tilbury and the legendary AMM.