

# Improvisation, Computers, and Primary Process: Why improvise with computers?

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ARTISTIC RESEARCH IN CONTEMPORARY MUSIC: COMPOSITION – INTERPRETATION -  
IMPROVISATION

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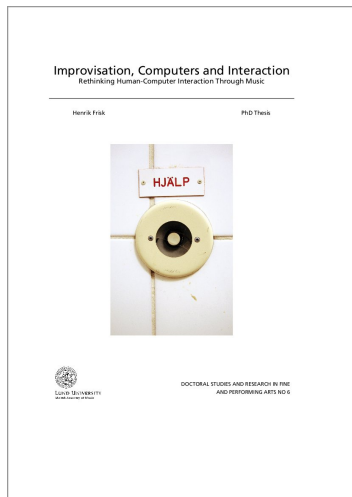


# Artistic Research

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# Improvisation, Computers and Interaction



# What is Improvisation?

- A substitute for organization?
- Bruno Nettl: “[i]n the conception of the art music world, improvisation embodies the absence of precise planning and discipline” (*An art neglected in scholarship*)
- Bruno Nettl: “discipline, intricacy, and control of complexities all play major roles in various kinds of improvisation” (*Ibid.*)
- But, improvisation is *also* absence of control.

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# Basis for current discussion

## The nature of improvisation

- Lack of control may in fact be important features.
- Computer technology may help to ‘un-learn’ stylistically bound musical knowledge.
- The ‘un-learning’ may be understood in terms of the concept of *primary process*.

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# Computers and Improvisation

## Computers-as-improvisers

- Computers are poor improvisers.
- The human capacity for making “good choices” spontaneously is enormous and still close to impossible to model in a computer program.

## Computers-as-instruments

- A human ‘computer-player’ is the interface.
- Any sound is possible: dream or disaster?

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# Computer and Improvisation

## Summary

- **Non-intuitive musical UI.**
- No physical contact between body and sound.
- No unified notion of what the computer-as-instrument consist of.
- The computer is useless as an instrument for improvisation(?)
- Yet, the computer is an agent in the practice of improvisation.

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# Improvisation and sensibility

## Personhood

- G. Lewis: “Afrological sensibility”
- G. Russel: “Intuitive Intelligence”
- The personal sound.
- Conclusion: Improvised music thrives on sensibility.
- In what sense may the computer be an agent of sensibility?



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# Primary process

## The language of the unconscious

- Bateson: The Algorithms of the heart.
- Music as a method of translation between primary and secondary process.
- Habit: actions become unconscious.
- Habit formation is not a guarantee for access to the unconscious.

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# Ornette Coleman

## Picking up the violin and the trumpet.

- To rid himself of the Parker legacy.
- Striving to play “without memory”
- Free from extra-musical parameters: Denardo Coleman
- Unknown instruments gave him internal freedom, liberated from physical memory.

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## *The Bride Stripped Bare by Her Bachelors, Even (The Large Glass) (1915-1923)*

- To rid himself of old fashioned drawing.
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- Duchamp: “I unlearned to draw. The point was to forget *with my hand.*”
- To consciously unlearn: Is it at all possible?

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# Resistance

## Why forget?

- To *increase* resistance.
- To oppose habit.
- The computer is an agent in improvised music not despite its shortcomings but *thanks to them*
- Frustration of an instrument's shortcomings are secondary process.
- Playing it is primary process.

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## The computer as a forgetting machine

- Musicians and artist have developed methods to achieve that which the computer allows us do prior to its existence.
- Habit formation is economy of conscious thought rather than access to unconscious.

## Aden Evens and the body

- “The musician who just allows his body to do what it will cannot be immerse in the music [...] the one who lets his body play is not putting himself on the line”

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# Thank you

I wish to thank the Center for Ny Musik for the invitation.

# Questions?

