

# Nikita Braguinski

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This profile briefly summarizes my recent and ongoing work in the field of media theory.

## **PhD dissertation: Aesthetics and semantics of electronic toy sound**

In this ongoing project I am investigating the special position that electronic toys occupy in regard to some of the core questions of media theory: Which parameters of their sounds can be described as noise or signal in terms of a communication model? Is noise an objective category? (I suggest that it is not.) Which effect do some exotic features of the Atari VCS video game console have on the musical system that is native to this technology? How can psychoanalysis explain Circuit bending? How can the Freudian concepts of the uncanny and the repetition compulsion be applied in the study of a speaking toy computer?

## **Rechnen als Spiel. Die verborgenen Beziehungen zwischen Tetris und dem Digitalcomputer. In: Retro. Computer - Spiele - Kultur (30) 2014. p. 32-33**

In this article I show that there is a deep structural link between the game mechanics of Tetris and the working principle of a digital computer.

## **„Das klingt so herrlich, das klingt so schön!“ - Die Ästhetik der Atari-VCS-Sounds. In: Retro. Computer - Spiele - Kultur (28) 2013. p. 30-33**

I suggest the use of the term „Atari tone system“ in regard to the frequencies produced by the game console's audio circuitry based on the difference between their structure and the inner logics of the Western tone system. Subsequently, Atari's use of the LFSR pseudo-random number generator for tone synthesis is explained.

**Circuit bending. Ein unheimlicher Spaß In: Retro. Computer - Spiele - Kultur (31) 2014. p. 38–39.**

Here, the Freudian notions of the uncanny and the repetition compulsion constitute the key arguments in analyzing the persistent fascination of retro computing and circuit bending.

**Ästhetisches Rauschen. Die Werteökonomie der Computerklänge (forthcoming article in the anthology „Shift Restore Escape“, ed. by Stefan Höltgen)**

The notion of „aesthetic noise“ as the unexpected part of the signal is introduced and explained in the context of the position that the sounds of video games of the 1980s occupy in different historical situations. This analysis is linked to the Gestalt psychological theory of cognition.

**Video: Nikita Braguinski - Games and digital culture (Leuphana university Lüneburg)**

What do the parallels between the structure of games and the technical logics of today's hardware and software look like? How can abstract games show the different difficulties that humans and machines have in solving complex problems?

<http://vimeo.com/97933888>

**Workshop presentation: The game of Go as a mathematical battleground (Leuphana university Lüneburg)**

I analyze the hidden parallels between the inner structure of the ancient Asian game of Go and the famous „Game of Life“ cellular automaton. The concept of „liberties“ is compared to the notion of the Von Neumann neighborhood. The high complexity emerging from the usage of carefully devised simple rules on a finite, discrete field of elements that can take up a limited number of states is discussed. Connections between strategy games and military simulation are reviewed.

**Workshop presentation: Speech Synthesis and the Uncanny (Humboldt university)**

Connections between the status of the „Speak & Spell“ toy computer as a medium and the notion of the uncanny are discussed.

**Data visualization using a rectangular spiral**

In this proposed visualization technique a rectangular grid of coordinates is filled with a spiral of elements representing segments of data. The usage of a form derived from the Ulam spiral is discussed in regard to its high potential in enabling the grouping of repeating elements in accordance with the Gestalt rules. Mapping of binary signals to black and white elements and of continuous signals to colors is explained.

[https://www.academia.edu/7380819/Die\\_Spiraldarstellung\\_-\\_ein\\_experimentelles\\_Visualisierungsverfahren](https://www.academia.edu/7380819/Die_Spiraldarstellung_-_ein_experimentelles_Visualisierungsverfahren)

Courses taught at Humboldt university Berlin (in German):

**Mathematical games. From Tetris to binary arithmetic. (MA, summer 2014)**

Abstract games are discussed in regard to their inner structure and the hidden connection between games, mathematics and technology of today's media.

<http://goo.gl/FxBnMg>

**The ear as a medium. (BA, winter 2013-2014)**

How does the physiology and psychology of hearing affect the ways in which we are sonically linked to our environment?

<http://goo.gl/JeP6vp>

**The medium as rubbish and as a commodity. (MA, winter 2013-2014)**

Critical approaches towards today's condition of media production and usage are discussed, including Michael Thompson's „rubbish theory“, Jonathan Sterne's analysis of „planned obsolescence“ and Guy Debord's notion of the „society of the spectacle“.

<http://goo.gl/qyjjl0>

**Sounds of electronic toys. (BA, winter 2012-2013)**

Sound production in children's toys. The image of the child (Douglas Kellner) and how it determines the range of possibilities in commercial toy products. The toy as an archive - the economy of newness (Boris Groys).

<http://goo.gl/XFLwG>

**Sounds of computer games. (BA, summer 2012)**

The technology of sound production in video games since the 1970s. Interactivity and nonlinearity. Chiptunes.

<http://tinyurl.com/cpufg8x>

(last revised: July 2014)