
Hyper Sensorial - Human Computed Neurodivergent Poem

Luca M. Damiani

Graphic and Media Design
London College of Communication
University of the Arts London
l.damiani@lcc.arts.ac.uk

ABSTRACT

In this video artwork, the author looks at the interaction between neurodiversity and media design, focusing on his acoustic condition of hyperacusis as well as his neurodivergent condition of Asperger's. There are many inner thoughts that the hyper sensorial acoustic disorder brings, and the author creates poems as an output, interrelating art and technology in the cognitive process, and underlining a cross-connection between the data and emotions.

KEYWORDS: Digital Media; Design; Science; Computing; Art; Neuroscience; Neurodiversity; Hyperacusis; Sensorial Design; Psychology; Technology

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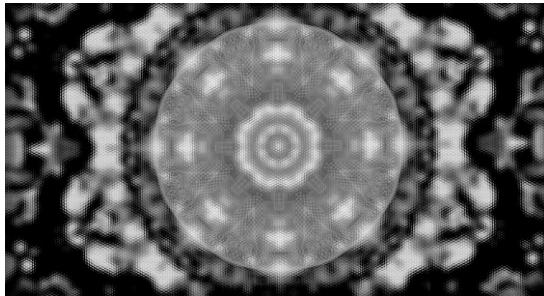


Figure 1: Image from the video, visualising sound reading of the poem and related media composition of neuro design work.

OVERVIEW

In this video-art piece, I look at the interaction between neurodiversity and media design, focusing on auto-ethnographic data [4] based on my acoustic condition of hyperacusis [1-2] as well as my asperger's neurological condition [3]. I reflect on the relation between surrounding sound that hyperacusis elevates in their intensity and pitches, creating pain and discomfort. There are many inner thoughts that the hyper sensorial acoustic disorder brings, and I create poems as an output. Here I want to relate to the interrelation between art and technology in this process to help me analyse and rationalise further observations, allowing a more distant perspective of the data and emotions. This piece shows an interaction between my human mind and its emotional reflections and feelings, engaging with a software technology processing for visualisation of those same feelings and connected outer words. As part of a therapeutic process I am currently following for the hyperacusis condition, and as part of the parallel auto-ethnographic observation, I collect info and notes on my different levels of mood each day. This creates patterns and data that myself and the medical team can use to observe changes that the sensorial disorder brings up. Taking different weekly numerical statistics and data overview from different tracking tools, I then started to abstract the information and create new graphic visualisations of the patterns and mood path. The connection between collected data and its visualisation in this work, follows the idea of abstraction and reductionism in art and brain science [5] as well as analysis in computational coding. The software approaches and reads the data, finding patterns and movement, creating new data which I then abstract, filter and design further. In this artwork, the human interaction is key on providing this data sharing, as well on constructing a layer of written and spoken thoughts (via a poem structure based on the diary notes) that it is also then shared via a cross-computational voice. The human voice is sided by a computational filter that conceptually signifies a further disruption of data, outer sound and inner voice. An interconnection is created in relation to the specific acoustic neurological exploration, recoding the analytical processing and interpreting the cognitive response.

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