GREEN NOISE John Richards

Richards, J. 2021. *Green Noise*. 4 December, Bowed Electrons 2021 Festival and Symposium, University of Cape Town, SA.

https://www.youtube.com/watch?v=bjgm3ABmAuU. Accessed 17/12/21

Abstract

During the pandemic, a microchip shortage emerged, and headlines such as "Chip Wars': US, China and the Battle for Semiconductor Supremacy" and "The Chip Wars of the 21st Century" hit the news. Although a full-blown crisis was averted, the shortage sent a warning signal around the globe about chip production and our dependency on such technologies. What if production stopped or materials for manufacturing chips became scarce or deplete? The chip crisis came knocking on my door when I recently tried to order a chip for an instrument to discover there was a two-year backorder! As a DIY electronic musician, I've started questioning whether I can carry on making stuff in the same way I was ten years ago. I've also asked the rhetorical question: How many oscillators does a musician need to create a piece of electronic music? And do I need to be more critical of what I make and how I make things? With the ever-growing range of sound-making products, can there be such a thing as ethical electronic music or an ethical music technology? The material properties of the microchip are considered as well as the microchips' symbolic value of power. The politics of making and critical making, low-level electronics and issues relating to originality and authenticity, working with limitations and the Lévi-Strauss' bricoleur are also discussed.

References

Bogers, L., and Chiappini, L. 2019. *The critical makers reader: (un)learning technology.* [Place of publication not identified]: Amsterdam Institute of Network Cultures.

Cascone, K. 2000. The Aesthetics of Failure: 'Post-Digital' Tendencies in Contemporary Computer Music. *Computer Music Journal.* 24 (4): 12-18.

Dunne, A. 2005. *Hertzian Tales: Electronic Products, Aesthetic Experience, and Critical Design*. Cambridge, Massachusetts: The MIT Press.

Gaver, W. 2001. Designing for ludic aspects of everyday life. *ERCIM News*, No.47. https://www.ercim.eu/publication/Ercim News/enw47/gaver.html

Hawari, M. and Hassan, M. 2008. E-waste: Ethical Implications for Education and Research. *IIUM Engineering Journal*, Vol. 9, No. 2.

Hertz, G. 2012. Critical Making. [Hollywood, Calif]: Telharmonium Press.

Hertz, G. 2017. *Disobedient Electronics: Protest*. [Canada]: The Studio for Critical Making

Ingold, T. 2013. Making: Anthropology, Archaeology, Art and Architecture. London; New York: Routledge.

Le Guin, U. K. 2016. *A Rant About 'Technology'.* https://conversations.e-flux.com/t/ursula-k-le-guin-a-rant-about-technology/3977

Low-tech Magazine. https://www.lowtechmagazine.com. Accessed 16/12/21.

Noble, D. 2017. Forces of Production: A Social History of Industrial Automation. [Place of publication not identified]: Routledge.

Pinch, T., and Trocco, F. 2004. *Analog days: the invention and impact of the Moog synthesizer*. Cambridge, Mass: Harvard University Press.

Ploeger, D. 2021. Deserted Devices and Wasted Fences: Everyday Technologies in Extreme Circumstances. [S.I.]: Triarchy Press

Richards, J. 2017. DIY and Maker Communities in Electronic Music. In Collins, N., and Escrivan, R. J., eds. *The Cambridge Companion to Electronic Music*. 2nd ed. Cambridge: Cambridge University Press. 238-257

Richards, J. 2018. Cardboard Boxes and Cupboards: Radical Electronic Music. Bringing New Music to New Audiences International Conference, De Montfort University, 21-23 September 2018.

Richards J., and Patel A.D. 2020. Pop-up for collaborative music-making. *Proceedings of the International Conference on New Interfaces for Musical Expression*. 452-457.

Rosenberg, N. 1982. *Inside the Black Box: Technology and Economics*. Cambridge: Cambridge University Press.

Smith, T., Sonnenfeld, D. A., & Pellow, D. N. 2006. *Challenging the chip: Labor rights and environmental justice in the global electronics industry*. Philadelphia: Temple University Press.

Théberge, P. 1997. Any sound you can imagine: making music, consuming technology. Hanover, NH: Wesleyan Univ. Press.

Widmer, R., Oswald-Krapf, H., Sinha-Khetriwal, D., Schnellmann, M., and Böni, H. 2005. Global perspectives on e-waste. *Environmental Impact Assessment Review*. 25 (5): 436-458.