



Potential of creative e-waste reuse in a degrowth context




Master Thesis Proposal, Jonas Wolter, MMD1



How can *creative reuse of old electronics*
contribute to a *degrowth* transformation?



Motivation



Degrowth & Technology

Sustainability, social justice and human
well-being instead of economic growth

Post-Capitalism



Degrowth



Anarchism

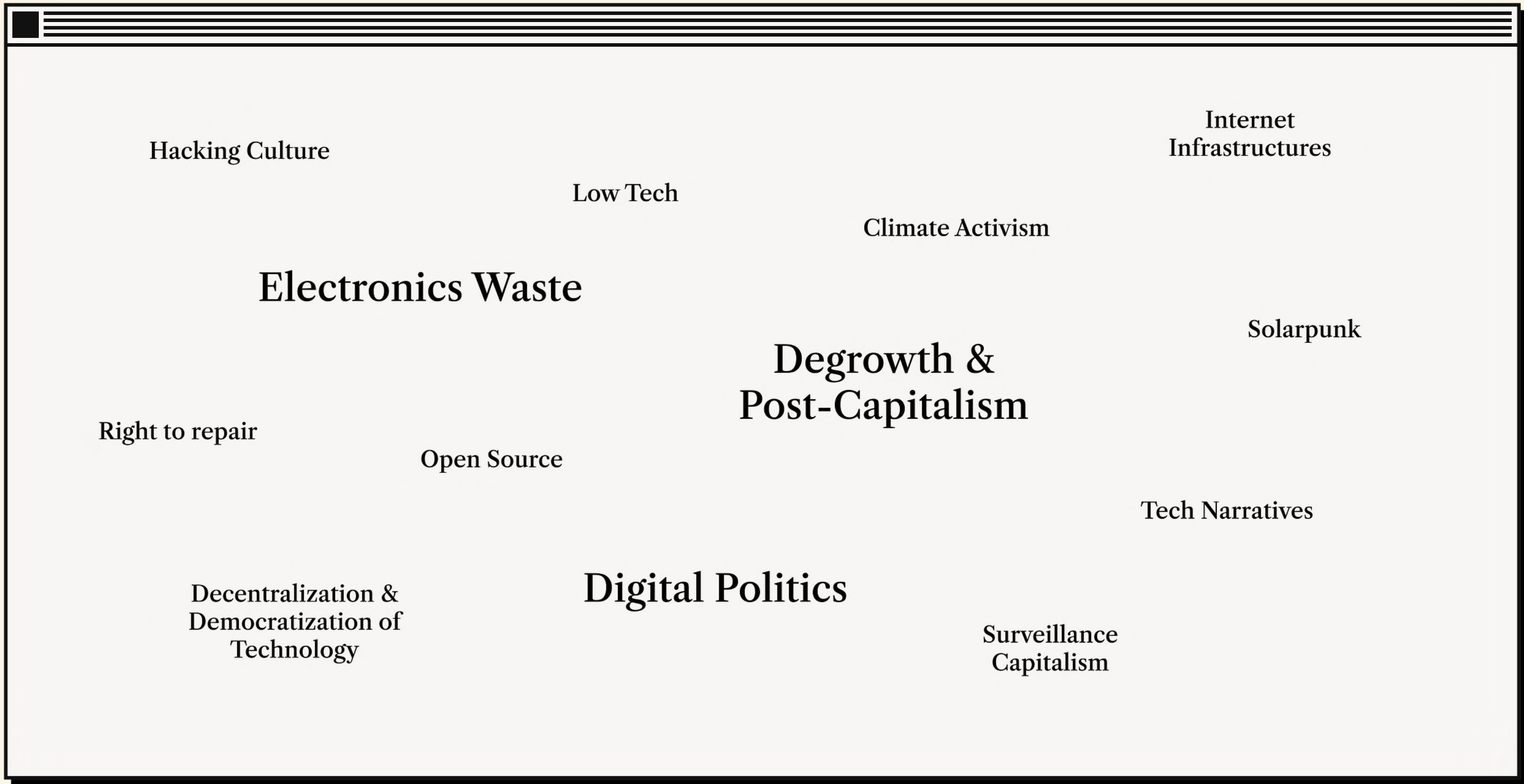


Socialism



Electronic Waste

from trash to treasure





Research question

General

How can *creative reuse of old electronics* contribute to a *degrowth* transformation?

Case Study Options

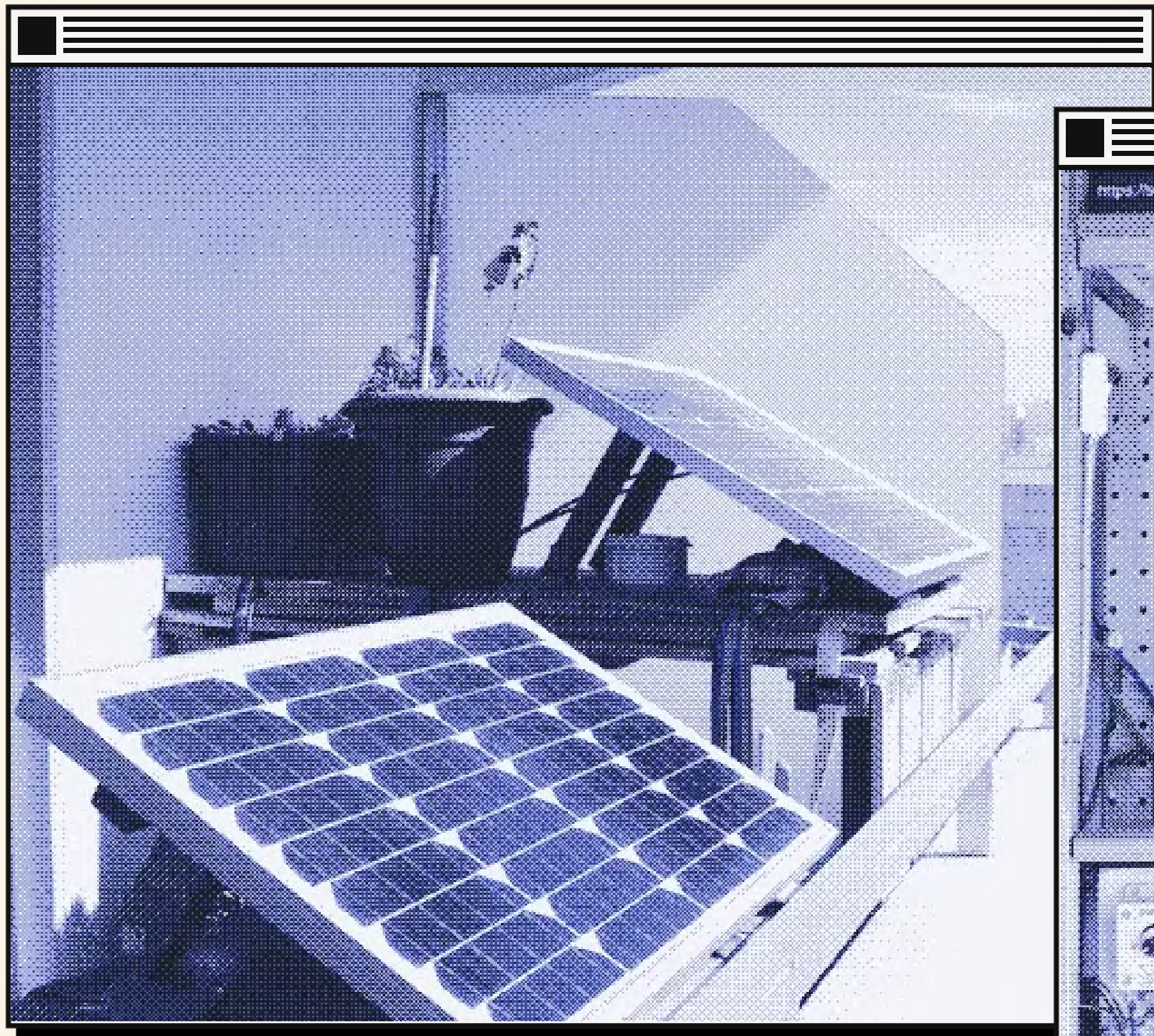
- What are potentials and challenges in creating *digital low-tech infrastructures* from repurposed electronics for use in *climate activist movements*?
- Evaluation of *electronic waste* and existing reusing practices in *manufacturing industries*



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This is a solar-powered website, which
means it sometimes goes offline

LOW-TECH MAGAZINE





Methodology

Literature Review

Comparison of research literature regarding Degrowth, Low Tech, Electronics Reuse and Hacking Culture.

Interviews

- Interviews with people involved in climate movements regarding their use of digital infrastructures
- Interviews with people creating digital tools for activist movements
- Interviews with people working in manufacturing companies regarding their e-waste practices

References

An overview of strategies for social-ecological transformation in the field of digital technologies and the cases of Low-Tech Magazine and DecidimBarlow, N., Regen, L., Cadiou, N., Chertkovskaya, E., Hollweg, M., Plank, C., Schulken, M., & Wolf, V. (Eds.). (2022). Degrowth & strategy: How to bring about social-ecological transformation . Mayfly Books.

Chertkovskaya, E., & Paulsson, A. (2021). Countering corporate violence: Degrowth, ecosocialism and organising beyond the destructive forces of capitalism. *Organization*, 28(3), 405–425. <https://doi.org/10.1177/1350508420975344>

Kim, S., & Paulos, E. (2011). Practices in the creative reuse of e-waste. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, 2395–2404. <https://doi.org/10.1145/1978942.1979292>

Kostakis, V., Latoufis, K., Liarokapis, M., & Bauwens, M. (2018). The convergence of digital commons with local manufacturing from a degrowth perspective: Two illustrative cases. *Journal of Cleaner Production*, 197, 1684–1693. <https://doi.org/10.1016/j.jclepro.2016.09.077>

Philippe, B. (2020). *The Age of Low Tech: Towards a Technologically Sustainable Civilization*. Policy Press.

Selwyn, N. (2023). Digital degrowth: Toward radically sustainable education technology. *Learning, Media and Technology*, 0(0), 1–14. <https://doi.org/10.1080/17439884.2022.2159978>

Sutherland, B. (2022). *Strategies for Degrowth Computing*. <https://doi.org/10.21428/bf6fb269.04676652>

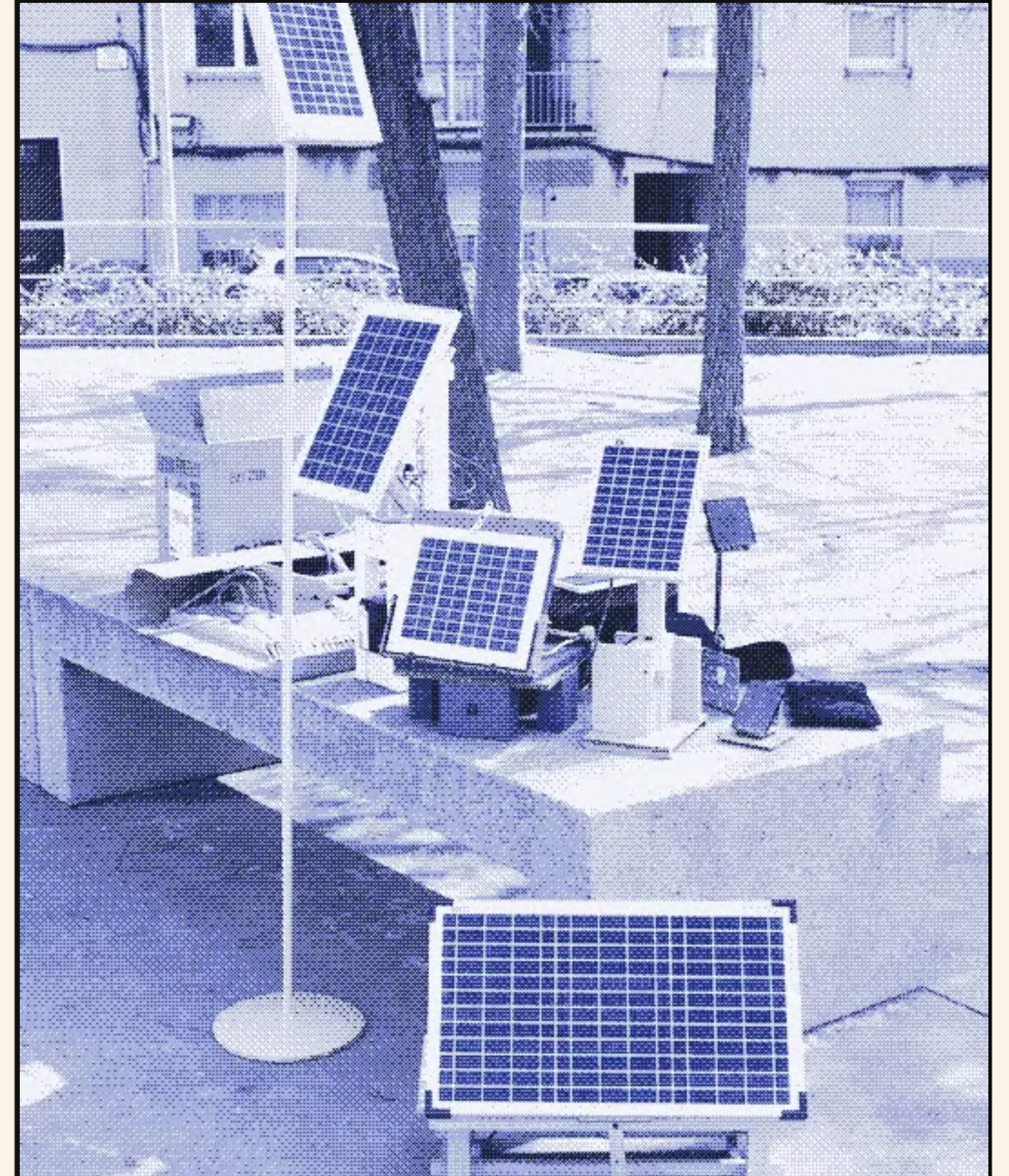
Vyas, D., & Vines, J. (2019). Making at the Margins: Making in an Under-resourced e-Waste Recycling Center. *Proceedings of the ACM on Human-Computer Interaction*, 3(CSCW), 188:1-188:23. <https://doi.org/10.1145/3359290>

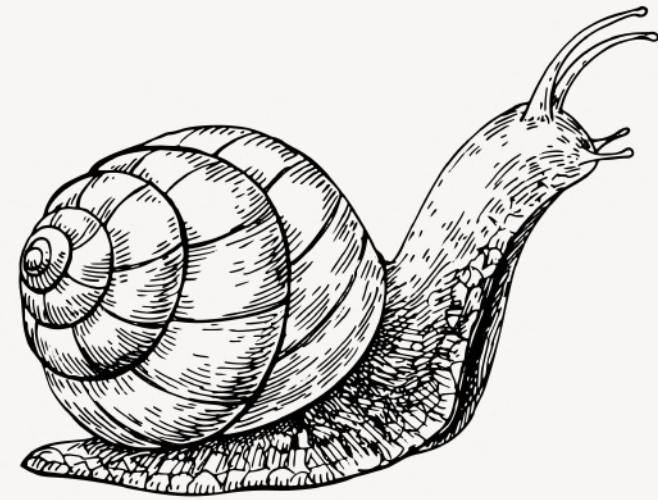
What might degrowth computing look like? (2022, April 7). *Critical Studies of EDUCATION & TECHNOLOGY*. <https://criticaledtech.com/2022/04/08/what-might-degrowth-computing-look-like/>

Abbing, R. R. (2021). ‘This is a solar-powered website, which means it sometimes goes offline’: A design inquiry into degrowth and ICT. *LIMITS Workshop on Computing within Limits*. <https://doi.org/10.21428/bf6fb269.e78d19f6>

Link to practical project

designing a convivial tool or artefact
from repurposed electronics





Merci!