

Recuperating labour's environmental potential

Julia Corwin 

The London School of Economics and Political Science, UK

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Abstract

In response to Carr's article, 'Repair and care: Locating the work of climate crisis', I explore how repair labour demonstrates the importance of skilled, hands-on labour for responding to times of breakdown and change. Like scholarship on apprenticeship and practical enskilment, repair work demonstrates how labour entails working with the material world and other workers, and hands-on engagement with complex and changing systems. Instead of approaching labour and environmental concerns as separate and often antagonistic, I believe attending to the embodied and relational nature of labour may provide insight on how to work towards a more just socio-environmental future.

Keywords

Repair, labour, skill, environment, climate change

One of the most consistent observations stemming from research on repair work is its (often overlooked) skill and creativity. Repair work is rarely rote or repetitive: while things break or require upkeep all the time, it's not necessarily predictable how they will or have been used, what they are used for and how they interact with different users. Things and structures, from individual devices to large factories, all function within changing social, political and climatological systems, which produce social and political friction and potential breakdown. Repair work requires the labourer to innovate and improvise in response to sudden changes, regular variations in a system, or a disruption in normal function (e.g. Henke & Sims, 2020; Orr, 1996). Carr's article on repair and care in climate change work is no exception, noting the skilled nature of this work in repair and maintenance work in steel mills, HVAC&R systems, and in the extended relationships of coal

workers. In many ways, climate change is the ultimate unpredictable change to a system, with climate and social scientists attempting to account for increasingly dramatic climatological changes across the planet and the social, political and economic causes and consequences of these changes.

In this commentary, I focus on the significance of repair labour in offering both skills and more broadly a relational approach to work and the material world that I believe provides insight to work towards a more just socio-environmental future. As Carr notes, labour and the environment are all too often treated as oppositional, with this regularly enforced by politicians, popular media and some

Corresponding author:

Julia Corwin, The London School of Economics and Political Science, Houghton Street, London WC2A 2AE, UK.

Email: j.e.corwin@lse.ac.uk

mainstream environment and labour organizations. This is particularly true with respect to discourse on low-carbon transitions, in which people who work in industries such as coal are politically and socially positioned as opposed to environmental movements. Instead of reinforcing this conflict, examining the detail-oriented and creative labour of repair allows us to examine more closely how people interact with the world around them through their labour and how this labour may act as a guide for working towards a more equitable and sustainable future.

My research on informal electronic waste management in India provides an example of how labour and the environment are too easily framed as in opposition to one another, and how reframing this enables the revaluation of the labour itself. In the early 2000s, attention to and concerns about e-waste began to grow, as reports proliferated about the hazardous materials embedded in everyday electronics and the dangers of handling these materials. As a relatively new and growing form of waste, electronic waste contains many different materials, primarily different metals, glass and plastics, and recycling them can be dangerous to workers and contribute to local air and water pollution. The predominant narrative according to reports from environmental NGOs and the media focused on e-waste being dumped in the Global South, where it was handled by informal recyclers; for example, in India, it has been estimated that between 90% and 95% of electronic waste is recycled in the informal sector (Kandhari & Sood, 2010; Reddy, 2013). This informal recycling labour has been regularly depicted as crude, unskilled and polluting, with environmental organizations advocating to end global trade in e-waste and prevent informal recycling in the Global South. The work became associated with the potential pollutants in the waste itself, rather than a closer examination of the broader economic relationships and on-the-ground labour practices of India's used electronics industries.

Labelling the labour itself as polluting identifies the labourers as responsible, rather than recognizing how waste and waste work are embedded in complex and unjust political and economic

networks. These workers are (sometimes barely) making a living by managing the waste of wealthier people. Electronic waste did not appear out of nowhere: it is a part of global production and destruction networks spanning the globe, in which the production and disposal of immense quantities of commodities and materials implicates all of us – not just informal e-waste recyclers. Likewise, the carbon labour that Carr discusses shows the complexity of determining what constitutes 'carbon' work in our present-day carbon economy, with essentially all forms of human (and non-human) life tied in some way to carbon (Bridge, 2011; Daggett, 2019). How can we single out coal miners when some of our everyday energy use depends on their labour, and when so much of the world's current systems have grown from and functioned through that labour? Given our collective imbrication in the carbon (and waste) economies, it is important to recognize and reflect on what we can learn from this labour in a time of dramatic climate change.

In the case of e-waste, as I and others have written elsewhere (Corwin, 2018; Reddy, 2013), this informal industry is doing significant waste reduction work; rather than solely recycling e-waste, India's informal sector is primarily engaged in widespread reuse and repair practices, deferring electronic waste and reusing materials otherwise destined for disposal. In India, repair workers regularly remake e-waste into valuable products through a variety of different but broadly related reuse industries, from repair to remanufacturing. In these industries, workers see life and value in used commodities that others have determined to be 'waste', and they harness considerable skills to repair and reinvent electronic commodities and recuperate what would otherwise be considered 'waste'.

Repair labour – and in Carr's examples, specifically industrial repair labour – offers a window into understanding the significance of skilled, hands-on labour for responding to times of breakdown and change. Repair work is too often dismissed as unskilled, manual labour – and more broadly, manual labour itself is associated with a lack of skill. In uncritical hierarchies of skill and knowledge, 'mental' labour is assumed to be the domain

of educated and intelligent workers, while ‘manual’ labour is stereotyped and sidelined, with implicit (and often explicit) assumptions that the work is unskilled and menial, able to be done by easily replaceable workers. Against such problematic hierarchies, repair work exemplifies how manual labour is both deeply mental as well as physical: Carr describes this as ‘skills ... developed through attunement, and the learned practice of becoming attentive to our social and material relations’. This skilled labour demonstrates how work cannot be separated as either ‘mental’ or ‘manual’; instead, labour is constantly responding to and negotiating with the world around us, what Iskander (2021: 15) describes as ‘creative responses to emergent conditions, moment-to-moment expressions of connection and relationship, and ongoing assertions of agency and imagination’. Like scholarship on apprenticeship and practical enskilment, repair work demonstrates how labour entails working with the material world and other workers as guide and partner (Adams, 2018; Carr, 2017; De Coss-Corzo, 2021).

In my research on India’s electronics repair industries, I observed these haptic skills and the creative work of rebuilding every day. Repairers redesigned custom desktop computers and servers using a combination of used and new parts; they experimented with parts and materials; and they were always looking to find the use or value of a device or its deconstructed components. I toured remanufacturing factories, including one in which new TVs were made out of old CRT computer monitors. These TVs were designed to be ‘smart’ TVs, with new WIFI connections and USB connectivity, and in one factory a few workers were wiring new circuit boards to update and reconfigure new TVs made from old monitors. These remanufactured TVs are at the interstices of new and old, featuring both new and used parts; they are also at the interstices of a reuse economy and a commodity-driven economy. The TVs enable people otherwise excluded from global consumer society to buy a ‘new’ TV, but with a significantly lower dependence on resources and a much smaller carbon footprint.

Despite recent attention to the skilled labour of repair, scholars of repair recognize that ‘repair’ and

‘maintenance’ as broadly discussed are not a universal good. Labour in our current carbon economy (or perhaps more accurately, in our current geologic epoch, the Anthropocene/Capitalocene) prompts us to confront more directly *what* should be repaired or conserved and what should be left behind. The actual labour of repair, based in hands-on skills, knowledge of intricate systems, and experienced and creative improvisational work processes, can be applied to many disparate systems, with vastly different effects and impacts. Repair work can fix oil rigs and pipelines (or an oil company’s image!), or it can fix people’s homes and support communities. It matters what is being repaired and maintained, and why. Many skills and forms of expertise are currently at work within harm-producing industries, whether it be the petroleum industry or disposable commodity production.

If we attend to the details of the innovative and skilled labour of repair, and its hands-on engagement with complex and changing systems, we turn our attention to what Richardson and Bissell (2019: 281) call the micropolitical site of skill and a study of work as based in ‘bodily practices’. Valuing labour at this intimate site of interaction – between labourer(s) and machine(s) or systems – frees labour from its macropolitical context, positioning ‘skill as the doing of labour, rather than skill as a labour classification’ (Richardson & Bissell, 2019: 279). I believe beyond classification of labour types and political assessments of ‘skill’, the embodied site of labour pushes us to centre the value of the labour itself, focusing on the site or scale of the labourer, and even more specifically their hands and bodies as the site of labour (e.g. Rifat et al., 2019). Separating labour from its broader contexts and the systems in which it is embedded can certainly be problematic (e.g. by encouraging exploitative labour) but it may also preserve skills while enabling the labour to be re-directed. This means rather than being subsumed by industry, labour skills are held in the hands of the workers themselves.

As Carr asserts, there are many skills from labour in carbon industries that are essential to a just transition and beyond – skills that are often overlooked and devalued. Climate change is leading to unpredictable

and disruptive environmental and social impacts, and yet we are able to anticipate (to a certain extent) what kind of changes might occur. While experts on climate change are most commonly assumed to be climate scientists, they also include industrial workers, farmers and fishers, community organizers and activists, and many other people with deeply experiential and skilled knowledge of environmental and human systems. This means valuing and recuperating labour processes and skills, while always being attendant to how they are embedded in extended relationships – and instead of reshaping the labour itself, focusing on how to change the systems within which they are embedded.


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ORCID iD

Julia Corwin  <https://orcid.org/0000-0002-6460-2129>

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