

# Time to fix: repair heuristics in Estonia and Portugal

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This paper discusses the relevance of repair actions for the maintenance of social bonds, suggesting that these interventions have heuristic possibilities to address the crises of our time. The general argument points to important questions, such as the distinction between caretaking, endurance and resilience. Building on a literature review and ten years of fieldwork in two different locations (Estonia and Portugal), it develops an argument for post-brokenness and repair as a heuristic of the contemporary social condition. The different examples here included show the complex temporality of fixing interventions as well as the urge to understanding contextual nuances of socio-material in/stability and damage. A multi-sited attention to fixing interventions allows us to comprehend the processes and conditions under which certain things acquire socio-material stability against the grain. In this sense, repair work is presented as socially and politically-loaded by putting things to some order, activating other kinds of relations and holding together different dimensions of care.

**KEYWORDS:** material culture, repair, broken world, endurance, the materiality of care.

**Es hora de arreglar: heurística de la reparación en Estonia y Portugal** ♦ Este artículo analiza la relevancia de las acciones de reparación para el mantenimiento de los vínculos sociales y sugiere que estas intervenciones tienen posibilidades heurísticas para abordar las crisis de nuestro tiempo. El argumento general apunta a cuestiones importantes, como la distinción entre cuidado, resistencia y resiliencia. A partir de una revisión de la literatura sobre reparación y diez años de trabajo de campo en Estonia y Portugal, el artículo propone la noción de post-rotura y de reparación como intervenciones necesarias en la condición socio-ecológica contemporánea. Los diferentes ejemplos aquí incluidos muestran la compleja temporalidad de las intervenciones reparadoras, así como la necesidad de comprender los matices contextuales de la inestabilidad sociomaterial. Una atención empírica de las intervenciones reparadoras nos permite comprender los procesos y condiciones bajo los cuales ciertas cosas adquieren estabilidad sociomaterial incluso en circunstancias de precariedad. En este sentido, el trabajo de reparación adquiere un valor simbólico al poner las cosas en orden, activar otros tipos de relaciones, y practicar diferentes dimensiones del cuidado.

**PALABRAS-CLAVE:** cultura material, reparación, mundo quebrado, resistencia, materialidad del cuidado.

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ADDRESSING THE CRISES OF OUR TIME, PEOPLE OF DIFFERENT BACK-grounds are seeking socio-material transformations through a fixing gesture, re-designing spaces for alternatives in the here and now and crafting minor futures outside the coordinates of late industrialism. The engagement with the analytical and symbolic value of repair and the study of different stages of brokenness is intended to be a key contribution of this article. It discusses the potential of “post-brokenness” and “repair” as heuristic terms (in contrast to resilience), proposing these concepts as analytical figures with empirical grounding while testing their applicability and refining their comparative potential across multiple scales and disciplines. By providing examples from two different countries, I will elaborate three arguments:

- 1) There is a continuity between material and social order, and the repair of things contributes to stabilise human life insofar as they give it a continuity and order. As a form of calibrating, intervening and reconfiguring, repair plays an important role in the constitution of the ethical in the realm of everyday life.
- 2) The conception of time changes through repair interventions; this can go from accelerated recoveries to deep-time processes of slowing down, as well as to intersecting individual and collective trajectories. Thus, we can question to what extent quick fixes and forays of improvement that do not change the condition of existence can be considered a form of repair, or rather of post-brokenness.
- 3) Even in cases of invisible or silent mending, repair indicates that something is broken, hence in need of reaction or intervention. However, we can still rework the point of brokenness as a practice of re-design – reconsidering the repair-ability of things as a form of public kindness and as an act of technosocial disobedience.

#### LOOKING FORWARD WHILE LOOKING BACK

Often past things deserve a second chance. Relationships, chairs, cars, umbrellas, houses, you name it. In some cases, they had fallen apart because of wrong use or design, because of being available too early or too late, done with materials that are not good enough, or in turn because of not being subject of maintenance work. While working on how to give a second chance to things, we can learn the way objects are made, their vulnerabilities, and eventually how they can also be re-designed. However, repair is hardly considered for future projections, despite its capacity to mobilise care and involve the past in future making activities.

Since Antiquity, we have been busy tinkering and repairing, moving things along, even if these gestures had other names and technologies were different. Alas, in a world characterised by frail modernities and vulnerable futures, holding things together has become more important than ever before. Accelerated cycles of production, consumption and discard, and the extensive availability of cheap mass-produced goods have led to an over-abundance of artefacts around us, but also to increasingly quick processes of replacement through which a large number of things is rapidly substituted and made redundant. Eventually, this has created a new problem, which is the increasing overflow and multiplicity of wastes, with materials and forms that cannot be turned into value in a straightforward manner (Abbott 2014; Pyyhtinen and Lehtonen 2023).

Indeed, never in our history have so many things been abandoned. This is also parallel to an over-rated valuation of novelty. Late-modern practices of consumer culture make us believe that it is urgent to create newer things, while making them durable is actually the most important. Indeed, contemporary problems require more repair and re-design rather than producing new things. Through ethnographic examples from Portugal and Estonia, I argue that, in some instances, the sound response to societal issues is to fix and reconfigure – moving towards something new by engaging with the existing things and relations around us –,<sup>1</sup> hence the idea of repair as a heuristic of social processes related to the awareness of the limits of the world and the re-evaluation of what exists as a form of innovation.

In a time of diminishing natural resources and climate upheaval, the need to engage in repair and re-design instead of producing new stuff, is a very relevant topic. Nevertheless, to make things and relationships last through time seems to be harder than ever before; perhaps, because *someone* must be taking care, fixing, doing maintenance work, observing, and mobilising different resources and multiple agencies, when *everyone* wants to create and to build. This concern for the practices that keep a system running reveals a growing awareness of the life cycle of things in a context of environmental crisis (Edensor 2016; Errázuriz and Green 2018). Nowadays, it is very easy to discard, to not care and to avoid any maintenance and repair work; we believe that someone will do it for us or a cheap replacement will be delivered to our front door.

As such, this article raises issues of responsibility, care and sustainability while questioning the “more is more” (or “new is more”) vision (Nóvoa 2020). Hence, paying attention to repair work can be considered an exercise of

1 Discussions pointing at this direction are also emerging among designers, challenging the traditional understanding of design as a future oriented practice merely focused on innovation and making new things; see Tonkinwise (2014), Soro, Lawrence and Taylor (2019), Lindström and Ståhl (2023), Crosby and Stein (2020).

heuristic repair in itself (Mattern 2018). Likewise, the ethnography describes how socio-material (in)stability, the persistence of things and how repair and brokenness are hardly final processes. Eventually, this shows that we need heuristics more profound than “resilience”, a concept that refers instead to a condition in which nothing is broken.<sup>2</sup> Repair also has a stronger epistemic dimension than resilience and is intimately integrated within the existing ecologies of knowledge (Star and Ruhleder 1996; Domínguez Rubio 2020), while it is socially embedded and culturally informed (Henke 2000; Graham and Thrift 2007; Gerasimova and Chuikina 2009).

In our life, we most often encounter fragments of repair and brokenness, instead of absolutes. Therefore, when looking at instances of brokenness and repair, there is a need to consider specific contexts and examine people’s approaches to disrepair at the local level, as well as to find out how fixing interventions are negotiated on different scales. Alas, the repair and maintenance of things is hardly accidental and it says something about social relationships too, thus working as a barometer of wider transformations (Alexander 2012). Still we give a second chance to things not because they are broken, but because we care for them (Spelman 2002). In this sense, the repair gesture tells about a particular subject-object relation, and it refers not just to material and technical affordances at stake.

The research unfolds through a series of vignettes from the field, making us aware of the fragility of the things we construct and showing why a given people care (or not) about specific things at a given moment. These repair practices are part of a wider re-articulation work, deployed as a practical and metaphorical containment of damage and stabilization of multidimensional processes that involve changes in resources, authority and socio-technical regimes (Shove 2012; Puig de la Bellacasa 2017). As social practices based on caring dispositions, contextual situations and contingent processes, acts of fixing and re-design emerge, persist, transform and eventually disappear, having nonetheless a cognitive, ethicopolitical impact.

2 While the term resilience reflects the ability to maintain an equilibrium (Bonanno 2004), repair suggests a trajectory in which normal functioning temporarily disappears. Specifically, resilience names the ability of given systems to maintain their function in the aftermath of a shock or a stress, combining crisis remediation and commercial development with maintaining a *status quo* (Adger 2000; Brand and Jax 2007). Simultaneously, this concept refers to a capacity to respond to external shocks and adapt when exposed to a hazard, and to a goal that places emphasis on what communities can do for themselves. Accordingly, discourses of resilience have been criticised for their lack of concern for power relations, their disregard of local agency and lack of interest in the existing vulnerabilities, signalling along a retreat of the state from planning and intervention despite the normative goal of the concept (Cannon and Muller-Mahn 2010; Walker and Cooper 2011; Bollig 2014).

## NOSTALGIA FOR THE REPAIRERS

Today, repair is most often used to describe the hands-on work of fixing different things – from fridges to countries, body parts, and friendships (Jarrín and Pussetti 2021). Etymologically, repairing comes from the Latin term *reparare*, meaning “to prepare again”. Nevertheless, repair exists in many different languages showing distinct nuances and bringing to light local systems of values. In this vein, this article points that this practice has also consequences for how we think of social relations. One of them is by lending continuity to the overwhelming sense of discontinuity brought by late capitalism, which presents destabilisation as an inevitable by-product of the emergence of innovation and novel socio-technical arrangements (Shove 2012; Turnheim and Geels 2013). However, by observing the way people extend the life of things, local values and ways of re-inhabiting the ordinary come to the forefront. I have seen this, for instance, in my participant observation at a series of fixing workshops in Lisbon.

In the Portuguese capital I visited repair houses (“casas”) where the owners have been mending shoes, clothes, furniture, cutlery, umbrellas and watches throughout different generations; also, I met with “rolling” repairers, such as knife grinders, who sharpen dull knives and scissors on a bike or motorcycle. Traditionally, repair workshops have been places where community work takes place, a semi-public meeting space whereby the repair worker was considered an authority figure among his peers. There we could also find a particular form of pedagogy, as techniques were passed on throughout generations and the workshops were considered an extension of the family house. Similarly, fixing acts were part of the production of the self since the repairer had a strong sense of his own identity as a skilled worker. The paradox, however, is that nowadays repair is both ubiquitous and yet devalued and relatively cheap, not situated on the receiving end of globalisation. The above referred attributes are not part of manufacturing or designing new things, and rather foreground fragility and *bricoleur* wisdom, instead of linear progress. Likewise, they suggest kinship ties and communal responsibility that does not fit well with contemporary understandings of time, trade and social networks.

This was manifested, for instance, when visiting the *loja da Boa Ideia* (shop Good Idea), where I encountered José Garcia:

“We are bound to extinction. It is sad, because it means that skills are lost, and in our case, part of the identity of my family... For us this is a business, of course, but we don’t do it just because of the money. As these have been traditionally family businesses, even home-shops, our relationship with the clients was very close, based on confidence and human treat,

being an active part of the life of the neighbourhood. Still there are lonely people who come here just to talk.”

His brother António is also a repairer and has his own workshop: *Casa Garcia* (Garcia’s House):

“Most of my clients are elderly people... In this era of accelerated rhythm, my profession has no place. Nowadays nobody has patience to learn how to repair things... and at times it is not possible to find the right material anymore.”

In different blogs, people refer to repair shops as a “relic” in danger of vanishing, which they might eventually visit just for nostalgic reasons (“*matar as saudades*”). Bloggers make a claim for changing the way we see and value our repair workers, elevating this type of under-appreciated labour to a higher social status. Nevertheless, traditional repair shops are about to disappear because of a lack of generational replacement and public support. Their children will not continue the business; they do not like it, as António Garcia confides because it is an unhealthy and one earns little money. The owners of the repair workshops explain that, since 2008, they have around 25% more of demand. However, the benefit has remained the same since they cannot rise their fee, the quality of products is worse and worse, and it is increasingly difficult to find some of the pieces. As a result, they have to work more to earn the same. In the case of Manel, the knife grinder I met, he has no insurance, contract or holidays. He is stopped on the go to sharp the cutlery of local restaurants and neighbours, 1.5 euros per knife, 2.5 euros for the scissors and 5 euros for the umbrellas.

With the vanishing of these repair shops particular skills that are beyond the edge of the speakable and cannot be transmitted digitally will disappear. The work of care can be easily overlooked because of having a slow, cumulative impact, instead of the heroic innovation proclaimed by modernist ideals. These practices of endurance cannot be transformed into numbers or clear-cut financial benefit. In more personal terms, repair workers restore value to objects that have been neglected, as if they were watering branches of the past – therefore, not simply to fixing something material, but also the relationships. As I learnt while visiting the repair workshops in Lisbon, notions of kinship are often more important for understanding local mending than were economic conditions, helping alongside to recover from the crisis and imposed austerity measures.

Despite having a price, the value of repair work is rather indeterminate. In this sense, repairability was not simply limited by the materiality of the device or by economic calculations, but also by emotional notions of value

and inter-generational transmission. Accordingly, the home-based economies of local repairers intertwined labour with kin-like ties.<sup>3</sup> Likewise, I noticed how repair work has a strong pedagogical dimension; it is part of the local ecologies of knowledge and it builds on the legacy of previous social bonds, welfare systems, infrastructure and historical entanglements. By rescuing objects laying in neglected storage areas one also recovers thoughts, emotions and relationships that remained unacknowledged for a long time too; hence it is a practice that activates a wider chain of revalorisation (Grossman 2015; Martínez 2020). Last but not least, it also shows that things remain available despite being in a state of unfinished disposal for decades, in some cases semi-broken or not exactly malfunctioning, and nonetheless present while offering a different availability (Hetherington 2004; Oroza 2009). As a result, the repairing of things that were discarded can lead to unexpected extensions of an object's life, being revalorised and re-appropriated in different contexts and by different people (Parsons and Maclaran 2009; Lovatt 2015; Martínez 2018b).

#### REPAIRING-WITH

Repair, re-use and bricolage have been traditionally associated with the poor, as a survival way of doing things. However, these practices allow us to shift the emphasis from managing abundance to enhancing sustainability through the re-use of disqualified resources. Besides its practical component, repair should also be understood as an effective entanglement with the world, an ethical commitment and sensitivity that resemble the ethos of care (Puig de la Bellacasa 2017). Because socio-material stability is a never fully attained condition, but rather a precarious achievement that must be constantly negotiated through repair and maintenance work (Denis and Pontille 2014, 2021).

This essay draws on the philosophical premises of Broken World Thinking, a form of earth-repair outlined by Steve Jackson (2014): firstly, the awareness about the fragility of our world; secondly, the idea that the fragility of the world can be repaired; thirdly, the assumption that repair is a key aspect of innovation itself (questioning modern ideals of control and planning as well as postulates that pose the creative capacity of humans as merely related to making something new). Based on these principles, we can argue that breakdown and the limits of the world have become key political problems, considering vulnerability as a natural state of things, and not as a temporary deviation or a condition of weakness to be denied in public (Tronto 1993; Mol 2008; Denis and Pontille 2015; Callén and Sánchez-Criado 2015; Tironi and Rodríguez-Giralt 2017). Fixing interventions can also be taken as matters of

3 House-based family enterprises were situated as prominent institutions for solidifying processes of continuity and inclusion (Lévi-Strauss 1982; Pina-Cabral 2021).

public concern, affecting more people and also several places simultaneously (Latour 2004; Graham and Thrift 2007; Strebel, Bovet and Sormani 2019).<sup>4</sup> It is a fact that brokenness and risks affect people globally, at a planetary scale, yet in ways that remain locally entangled, showing specific cultural aspects and nuances (Martínez and Laviolette 2019).

The action of repairing something implies a response to a break or failure, but also leads to paying attention to the available tools, materials and skills as well as to wider relations around the problem. Socio-material stability is both challenged and sustained by expectations of and capacities for maintenance, hence it is important to identify different stages of brokenness. Repair can also be taken as a human capacity to propose and intervene, an impulse to mitigate an unstable condition of existence and eventually alter the limits of what is possible. In this sense, the study of repair practices provides information regarding social dynamics and cultural appreciation. An example of this is the case of Ljuda. After completing her training in typography, she moved to Tallinn in 1972 and worked in the Ühiselu printing house until 2002, when this printing company was integrated into Reusner publishers. Then, the old workers were downgraded to do mechanic tasks such as supplying paper to the newly imported machines. As Ljuda understood that her skills were considered as obsolete, she went to an earlier retirement. However, a few years later the archaeologist Madis Mikkor found a Victoria 1040-2 typesetting machine in a storehouse in the suburbs of Tallinn and brought it to the occupied Polymer factory in the centre of Tallinn. Youngsters got increasingly curious of how to use it and searched around for someone with these skills, finally finding Ljuda.

Once Polymer was closed, printing artefacts were brought to Tartu and placed in the newly created Printing Museum. “I was originally involved because of emotional reasons, I like the shape, sound and smell of these machines. Also, I believe that innovation stems from the understanding of old technologies. From them, we can learn from them the basic rules and past dead-end solutions”, remarks Lemmit Kaplinski, founder and former director of the museum. For many years, the Printing Museum has been inviting Ljuda to come to Tartu to get dirty, teaching a new generation to design and print posters with typesetting machines. For Ljuda, teaching how to fix and use old technologies makes possible an island of order in an ocean of disorder.

Repair workers do not just deploy a series of resourceful skills, but also a particular way of seeing the world – as continually subject to the need for repair and as offering affordances to cope with wider tensions and accommodate

4 In the last decades, more attention has been paid to the practices that keep a system running in a context of crisis (Beck 1992) and to the new moral economies that produced a global displacement of debris (and risk) to other places, practices often glossed over in feel-good accounts (Alexander and Reno 2012).



changes. It is in this sense that we can talk of a heuristic repair: a way of learning and processing; part of a concrete horizon of hope. We make the very world of artefacts that we live in, use and destroy, turning anything we get in contact with into part of our condition of existence (Arendt 1958). As a result, the things we work with contribute to create a sense of self, while acknowledging the mutual vulnerability of humans and their environments. Likewise, the equipment we use takes part in the forming of our thought, displaying silent working knowledge (Harper 1987).

Reparative practices have to do with the body too, as a physical medium. Because repair work is constitutive of particular embodied thinking, bringing about transformative knowledge (Sennett 2008; Ingold 2013) and involving a considerable range of situated imaginations and reflections (Orr 1996; Dant 2009). Things in disrepair ask us to be careful and work through the interrelationships between repair and brokenness.<sup>5</sup> However, not just the qualities of the material and the expertise of those repairing; power relations and the availability of tools often shape how the fixing should be done and who might not be able to do it, as well as what lays beyond the network of care (see Houston 2017).

## POST-BROKENNESS

Socio-material disruptions are pervasive; people react to them through the rework of things, extending the life objects while answering to breakdown. And yet, things keep getting broken again and again, thus in need of attention (Martínez 2019a). Nevertheless, brokenness does not always involve mistakes and misbehaviour, but rather use and time, reminding us of the interdependency of our worlds (Carroll, Jeevendrampillai and Parkhurst 2017). Further, embracing the trope of breakdown seemingly leads to focus on exceptional situations; however, this condition is ordinary for many, living in a situation in which everything returns to “normal”, yet a normality in which things have not necessarily been fixed and keep on in disrepair.

An example of this is “Chudamäe” (Чудо-мяэ), a wonderland created by Jelena Tulženko and Tatjana Mikhailova in the outskirts of the former-atomic town of Sillamäe. In 2014, a group of pensioners decided to build their own resting place with garlands hanging on trees, over a hundred toys carefully seated and curated, benches, tables, banners, carved figures, a canopy and

5 By replacing, adding and modifying, the repairer manages to extend the function and utility of an object. Yet, unlike the engineer, the repairer-bricoleur does not subordinate the tinkering tasks to the availability of materials at hand (Lévi-Strauss 1966). Instead, the tinker gathers the available elements on the principle of coming in handy and the beauty of the gesture, fabricating and improvising solutions that might be less costly, more effective and beneficial to the community as a collective (Harper 1987).

a booth. “We had no place where to hang and rest and started to get a little bored. And our grandchildren grew up and the toys stayed around”, explains Jelena. Little by little, with their own hands, they have been developing the look and comfort of the place. Five members of the group have died in the meantime, and the other two already got tired of working on the project, leaving only Jelena and Tatjana to take care of the glade.

“Many people have helped us to construct stuff like the booth or arcades. We could not do all that just on our own. But still, we don’t have enough men”, Tatjana states. They all engaged in DIY heritage, working with abandoned things and ways of doing not traditionally identified as political or belonging to discourses of resistance. These material practices make their lives meaningful, despite a condition of precarity. These fixing acts show that we can still rework the point of brokenness as a form of re-designing the social, linking vulnerability and socio-material stability not as opposites. Indeed, in the practice of fixing, it is hard to establish a clear distinction between beginnings and endings rather appearing as a vernacular ordering in flux, organising, reformulating, experimenting, juxtaposing.

In a society conditioned by historical disruptions, accelerated changes and pressure to aimlessly create new things such as the Estonian one, repairing appears as a practice that provides continuity and makes a discarded past available anew. Hence, disrepair is not only closely tied with sustainability, but also with time and historical representations (Martínez 2018a, 2021; De Jong 2022), because disrepair might relegate certain people and spaces to the margins of normality and of history, therefore making them feel obsolete and not belonging to the present. In turn, we can take fixing interventions as a gesture through which problematic legacies can find a place in a previously unwelcoming present, practicing repair as a form of preservation without permission (Brand 2012; Denis and Pontille 2019).



*Figure 1 – A corner of “Chudamäe”.*

Source: Francisco Martínez, August 23, 2023.

Any breakage seems to put an end to a time and to an order; but it is repair that re-establishes a sense of how things should be through a constant ordering process (DeSilvey, Bond and Ryan 2013; Ureta 2014). However, dis-repair might express different stages and socio-material registers, to the point that, in some cases, fixing can also be a part of different endings (Cohn 2016; Frederiksen 2016; Martínez 2019b). In many cases, repair is also done without knowing clearly where the problem is or what are we really doing, improvising and devising things anew, once the limits of normalised procedures have been reached (Orr 1996; Oroza 2009; Corsín Jiménez 2018).

I noticed this, for instance, while meeting Jelena Mutonen in Kohtla-Järve (Eastern Estonia). A car drive around this town shows leftovers of mining that resemble lunar landscapes, deteriorated buildings, rusting machinery and spacious urban planning. If stepping out of the car, you can then feel the chemical smells related to the processing of oil shale – the main natural resource in the area.<sup>6</sup> Depopulation is heavily affected by the high unemployment rate that followed the break-up of the Soviet Union. Also, it has been rising due to corporate restructuring regarding the EU Green Deal regulations. One of the consequences of this condition of negative capability has been that the real estate of Kohtla-Järve has radically lost its value and apartments often are worth less than a second-hand car, as there are thousands of them left vacant. After decades approaching this societal issue as a merely local problem, the Estonian Ministry of Finances initiated in 2020 a pilot project in which the demolition of half-empty apartment houses is proposed as a future-making intervention, suggested to involve endurance and to bring back order to the urban fabric.

Jelena lives in one of these apartment buildings that are considered for demolition. However, parallel to these discussions about “liquidating” Soviet architecture, she has been refurbishing the entrances, basements and attics of the buildings in her hood with creative mosaics, handmade out of leftovers taken from nearby construction or demolition works. In her view, Jelena is involved in a horizontal materialisation of hope, finding value where there was none, practicing care beyond the temporal and material logics of capital:

“It all started when I had to throw a lot of tiles to the container and I felt pity, so I composed a bird with them. First, I tried on my own in the basement to see what I am capable of. It was in such a bad condition, it was terrible! My husband helped me cleaning it a bit and he said ‘I hope you know what you are doing’. I am not a professional, but with patience you can do it. Always in my free time, two hours here and there. Later I also made it

6 The extraction and processing of oil shale and the manufacture of various petroleum products remains the key economic sector in Eastern Estonia. One of the leading companies is Viru Keemia Grupp, which processes two million tons of rock fragments per year.

beautiful upstairs, at the entrance and in the attic. With the mosaics, I can close holes and cover horrible places with beauty... I want to make the life of people less stressful... I believe these installations contribute positively to how people organise their everyday.”

There is a vertical repair practice that upholds power structures, and another form of horizontal intervention that rather transforms both relations around and the repairer back (Henke and Sims 2020). The interventions by Jelena Mutonen, Jelena Tulženko and Tatjana Mikhailova’s belong to the second one, even if it does not reach a full repair. There are other examples of mending practices in Estonia, nonetheless. For instance, the Paranduskelder in Tartu, the Repair Festival in Viljandi, and the Kopli 93 association in Tallinn. They aim at the preservation of repair skills and to slow down society’s level of consumption and discard, especially among younger generations. However, while intending to be critical, they still present their activities as related to upcycling and the predicates of circular economy, thus not fully considering the anaeconomic aspects of their work and translating repair into capitalist value.

Further, we can also refer to repair work as a form of material participation (Marres 2012), addressing social problems via politically disqualified means (Scott 1990). Because the reworking of things that are public and common can operate as a form of contestation, one from within, redesigning who and what counts as well as who’s entitled for what (Rancière 2006). The overwhelming first impression of disrepair and pollution in Kohtla-Järve is contested when we pay attention to the ongoing interventions that establish socio-material stability. As Elena demonstrates, we can re-design and rework the point of brokenness as a generative, open-ended gesture and as an element of public kindness. Which might be a good learning for the 21<sup>st</sup> century.



*Figures 2 and 3 – “Look here! This is where I keep some of my tools and materials. I hardly throw away anything, because I can find use for it later on”. Source: Francisco Martínez, May 15, 2022.*

## CONCLUSION

This article argued for reconsidering the heuristic relationship between breakdown and mending to advance in a reparative thinking able to address contemporary issues. It set out to contributing to the interdisciplinary field of repair studies by opening up a range of questions about care-taking in two European countries. The ethnography connected ideas of brokenness and repair empirically and analytically, linking them not as opposites, but as with a wide range of instances in-between. By doing so, it reflected on the multiplicity of disrepair in meaning and temporality. In this vein, the article proposes the concept of post-brokenness to better understand such conditions in which recovery has not been achieved, yet many things continue to go on in the meantime. The research of how things might be broken or semi-damaged as a point of principle reveals what is missing and the difference between working and functioning (Sohn-Rethel 1992), making visible ongoing socio-material processes, re-evaluations and care practices.

Within that framework, repair appears to be better concept than resilience to comprehend the decisions and concrete practices which enable things lasting in time. This research also explained how repair can be conceived in ethical and aesthetic registers and bring out their implication with one another. Fixing and mending are gestures that can influence social dynamics beyond the specific material intervention. Therefore, repair cannot be merely explained by the rationale of cost saving: it is a way of putting things together anew and, by doing so, it can also work as a symbolic act of refusal to obsolescence, cultural abandonment and social negligence, therefore being infra-political. For instance, we saw how repair interventions can help to recover identities, histories and relationships, thus broadening the considerations for the social, and allowing things a second opportunity.

Finally, the article also argues for repair work as an embodied competence that secures an epistemological and practical continuation, in many cases a complex one, because repair work mobilises caring forces against socio-material instability, while being embedded in wider knowledges and infrastructures that maintain the world. Repair refers therefore to the processes and relations through which our worlds are sustained, materialising questions of care and sustainability. Acts of fixing and mending are thus important as a form of passing through and carrying out, as well as a practice that grants a person dignity. However, care itself is required for the repairers, since chance won't find a broken item if we do not pay attention to it and mobilise resources to mend it.

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