INTRODUCTION

Insiders' Manual to Breakdown

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> From a certain point on, there is no more turning back. That is the point that must be reached.
>
> —Franz Kafka, *The Zurau Aphorisms*

Lose something that you highly appreciate, try hard in the art of failing, be obdurate in the error, persist in the awkwardness, and then think of what you have learnt. We relapse and fall, and then we stand up again. Also things fail and slip back. They get broken again and again; they persist in falling apart. We all know about failed conjugal lives, about fallen ice creams, hair and porcelains. A good companion gets sick; a teenager falls in love, again and again, merciless. Out of this (increasingly fragmented) combination – of system and error, of silence and noise, of dirt and cleanness – we make music, art, business and politics. If you have read to this point, it is because you also share our interest in accidents and people who have failed, those who don't do things as they are told, who don't follow straight lines, champions of the accident, insiders to failure and mistakes. I am sorry to insist, but systems fail. Weak states are prone to violent coups and revolutions. The financial market follows patterns of boom, bust, kaboom! Vehicles crash. Buildings and infrastructures crack. Smartphones run out of battery. We also know that our body can react strangely sometimes.

Ordinary life is made up of eventful junctures, constant surprises and adjustments that go beyond all attempts to rigorously plan things and manifest a gap between how the world is and how it should be. Indeed, I felt so good in the morning; I expected to take a shower and then to drink a coffee. However, today the hot water did not work, the coffee pot appeared empty, and the internet was slow. And then the day continues and life does

not stop. Failure can be both – embedded in and disruptive of everyday life. It is hard though to measure the depth of a failure, and also of our altered mood, but it is worth examining instances of error and failure, as an exercise of critical breaking. The world touches us through failures. Brokenness feels like something, but one does not know what it looks like, and even less how to verbalise that something. Modern societies lack a language in which to discuss failure beyond economic reasoning. In a way, it is like Roland Barthes' argument (1978) regarding the lack of a verbal system capable of interpreting amorous experiences. Current discourses about failure are misleading, if not annoying. They ignore the fact that failure provides space for thinking and self-assessment by interrupting the expected flow of things. Also, they overlook how wasted time can be socially and culturally productive, especially in contexts where we are impelled to avoid what is inefficient, distorted, outside of the straight line (Ahmed 2006; Martínez 2018b).

Nonetheless, accidents and brokenness do not always involve mistakes and misbehaviour, but rather use, testing and tinkering. Likewise, failure does not have to be understood necessarily as the end of knowledge; it can also be considered as an experiential process integral to learning (Miyazaki and Riles 2005), hard to replicate or reproduce, having patina and an aura (Boym 2017). Indeed, failures do not occur twice in the same way, they offer many lessons, and give rise to other forms of life. Ordinary failures open up the potential for organising our lives differently, and for stepping where we are not expected, generating disordering affects that are resistant to categorisation.

Hardly Ever Final

What is gained from an ethnography of repair and breakage? What does it mean to claim that something is broken? Who measures the value of fixing up, and how? This anthology explores the conditions of brokenness and repair in different social and cultural settings. It is, thus, about people doing things, handling situations: holding on, letting go. Also, it studies how both people and institutions develop strategies of maintaining, repairing and fixing up – from objects to concepts, social relations and feelings. The focus on repair opens up a wide range of questions about responsibility, care-taking and sustainability. To repair is an act on the world: to engage in mending and fixing entails a relational world-building that materialises affective formations. It also settles endurance, material sensitivity and empathy, as well as more altruistic values oriented towards the sustainability of life.

Brokenness, in turn, is seen as a pervasive condition of disarray and disorder, an offence against the neat and tidy. Any breakage puts an end to a time and to an order. Hence, it implies some sort of adjustment, a generative tension and a measure of entropy. Yet breakdown can also be part of a continuum, ordinary and normal, full of activity and exchange (see Drazin in this volume). Breakage is hardly ever absolute and final. Neither is repair. Repair has continually to be worked at and is not necessarily pleasant. It rather hurts, while simultaneously it liberates the practitioner from the tyranny of that voracious king called Breakdown. Things are constantly falling out of place, deteriorating, malfunctioning, falling into disrepair, in some cases losing their status as objects and always attesting to the fallibility and fracturability of the world. To keep things as objects and in order is thus a process without end (Domínguez Rubio 2016). Repairing equally involves a degree of normalisation, as it recognises a certain 'fixed' state to which the failing system should evolve as well as the accepted strategies to reach unbrokenness (Ureta 2014).

For a productive dialogue between 'breakage' as an analytical trope and as an ethnographic fact, we might also be interested in introducing a few nuances about the difference between all the terms used: breakdown relates to a failure of functioning; breakage refers rather to the act of breaking and what is left over; while brokenness alludes to the quality of being broken. All three conditions bring a failure of relationships to the forefront, as value is reproduced or lost owing to all-too-human choices, such as repair interventions, investment and care. Breakdown and the death of things is thus contingent to situated decisions, grounded in specific contexts and structures (Cairns and Jacobs 2014). One of the key differences between them is that brokenness testifies to negligence, while repair appears as a generative experience of care and potentiality: to repair is a form of passing through and carrying out, a way of lending continuity to discontinuity, despite the utter impossibility of a whole, complete, absolute restoration.

We Are All Repairers

Collectively, the research presented here reconsiders the dialectics of repair and brokenness by exploring how attempts at mending influence wider social processes. The anthology moves the reader across a mosaic of discussions on the dynamics of material production and cultural mediation, creating synergies across themes of 'breakage' and 'repair'. We aim at providing a device for questioning what it means to fix something, as well as

exploring the learning potential that breakdown entails and how the design of things also manifests a view on their maintenance and repairability. In this way, we hope to set out a fecund cross-disciplinary meeting ground for the empirical and the conceptual study of responses to brokenness, contributing to crafting the field of repair studies, recalibrating ideologies of failure, challenging innovation as the dominant paradigm, and strengthening alternate views of affect theory, critical heritage, anthropology, archaeology, material culture and media studies.

By starting with a mundane object or situation, the contributors work with seemingly trivial details and show how they can create an understanding of large issues and political problems. It can be a malfunctioning elevator or a worn out trolleybus line in post-Soviet settings, a pothole in the road, a sunken warship, a broken favourite toy, a stalled snowmobile in arctic Siberia or a group of Norwegian villagers trying to use American retro bric-a-brac for a local festival. There is a good pedagogy but also a creative analytical strategy in such approaches. With a focus on the materiality of these processes of maintenance and repair, there is also much on the haptic dimensions of everyday life, so often forgotten. However, what makes repair relevant is not that things break, but that we care if they do (Spelman 2002; Puig de la Bellacasa 2011)

Our ethnographic responses engage with these matters, developing an open-ended combination of empirical and theoretical questions, which include: At what point is something broken repairable? How much tolerance for failure do our societies have? Where and when do the social relationships that occur during the act of repairing something manifest themselves? What are the social relationships that take place around repair? Our first answer would be that the relevance of repair is not its occurrence, but the values attached, as well as its aesthetic and moral implications (see also Alexander 2012). The effects of restoring things extend far beyond the physical facet; they enable the recreation of social relationships.

Repair is also a practice of placing, entangled in a number of localised relationships that contribute to creating transcendental narratives of reconstitution after abandonment, or of recuperation after breakdown. This understanding of repair updates the Western idea that the healing of past wrongs and empowerment can happen through verbal recounting, suggesting material repair as permeating synchronisation and public recuperation. We can also take repair as an enactment of care, a matter of everyday interaction, manifested in the form of affirmative interventions and affective transmissions that have significance as public feelings (Laviolette 2006; Stewart 2007; Martínez 2017). Activities such as inhabiting, gardening and refurbishing actively change our surrounding material landscapes and shape the meanings associated with them (Strebel 2011). These practices

show that other elements and people have been here before us, and also that some new ones will come.

Fixing Is a Political Aspiration

The book's affect-informed ethnographies account for how attempts to lengthen the lives of things allow people to construct a moral self, and/or connect with others and their environment. Overall, talking about the values associated with repair requires understanding people's ideas about their society, their standards, frames of behaviour and orders of worth (Boltanski and Thévenot 2006). Repair and fixing interventions have become matters of public concern. Arguably, this is due to the appreciation of the limits and fragility of the worlds we inhabit and a recognition that many of the orders of modernity are in the process of coming apart (Jackson 2014). Failures and breakdowns are crucial situations in the production of sociotechnical inequities (Graham 2010). We can observe that breakdowns have an impact on a large number of people simultaneously (Graham and Thrift 2007). Indeed, feelings of uselessness have become an intrinsic aspect of contemporary life (Bauman 2004).

In turn, the recovery of past things appears as one of the most symbolic instruments used in negotiating abrupt changes and belonging. It helps to connect generations and ensure stability in the material world, demonstrating a relationship between things and human security (Cherrier and Ponner 2010). Material relations are central to the process of political participation and the production of knowledge (Latour 2005; Marres 2012). For instance, we can relate the recuperation of social bonds with the reworking of things and the engagement in practices beyond the capitalist culture of competition, consumption, expenditure and excess. The mending of things recreates value in objects and resources that have been wasted, reconnecting personal biographies to public and private materiality (Martínez 2018a). In so doing, repair demonstrates concern with continuity and change, and with the interaction between the two, becoming a way of 'preservation without permission' (Brand 2012), and establishing a dialectic relation between necessity and freedom (Oroza 2009).

Our possessions, the tools we use, and the built environment around us are everyday elements of sense-making. Material and temporal considerations redefine the realm of possibility, generating specific meanings and affects, thus making certain experiences and narratives more viable (Kracauer [1927] 1995; Barthes 1957; Simmel 1997). Such considerations are always conjectural to a society, and hence affect the actual power relations, values and representations (Miller 2005). By accounting for

quotidian practices of fixing and breakdown and how these acts help to construct multidimensional connections and stabilise matter (Edensor 2016), previous studies on repair and maintenance have made visible the multiple temporalities that shape things (Houston 2017), the politics of recuperating (Guyer 2017; Sánchez Criado 2019) and different regimes of maintenance (Denis and Pontille 2017). Prosaically, fixing is a practice that restores the pragmatic or symbolic function of things (Gerasimova and Chuikina 2009). But in this project, we want to approach repair in a broader sense, as a theory-making practice, focusing on mending as works of adaptation, reconnection and recuperation, which generate in turn a rich array of physical transformations as well as new aesthetic and intellectual genres.

Talent for Destruction

My anthropological interest in repair appeared accidentally, yet with some biographical projections, as psychoanalysts would say. My grandfather is known for his hoarding and tinkering, and I always envied the mechanic skills of my father. Also, my ex, before our rupture, used to tell me that I have a facility for breaking things and relationships. 'You have talent for destruction', she insisted. Then, I could not come up with a good answer, but now I can say that breakage is just a way of changing things and seeing what happens next. A failure, an accident, a breakdown is a new beginning and a liminal point of assessment. It is like an adventure: an intense exploration in which we move away from a centre, going east, going south, going off, breaking through, and feeling the adrenaline rush from 'being in the edge'.

Failures make evident the possibility of breakthrough, of becoming something else, telling us about accidental findings, gaps, tricksters and hackers. This volume calls into question the assumption that creativity always leads to novelty; in many cases, breakthroughs occur through non-heroic acts such as tinkering, material manipulations and the rearrangement of things (Latour 2008; Farías and Wilkie 2016). Breakthrough is a copy-error exercise with a durable impact. Hence, we can also take breakdown, erosion and decay as the starting points of our designs, instead of novelty, growth and progress (Jackson 2014). Failures and lapses do not always materialise a systemic breakdown or a point of disequilibrium; they can also be an asset, if they happen in the early stages of a process, thus becoming an element of learning, experimentation and innovation (Birla 2016), or a window of opportunity characterised by potentiality (Latour 1996; Miyazaki and Riles 2005). In this sense, failure can be understood not simply as a

crisis, but also as a terrain of interstitiality, which can also exist as a modality of planning or as a way of keeping people busy (Abram and Weszkalnys 2013; Ssorin-Chaikov 2016).

Systems are organised by defining why some things are proper and others failures (Douglas 1966).1 However, in our life, we most often encounter fragments of repair and brokenness and of failure and success, instead of absolutes (Murawski 2018). Defining the contours of brokenness is, therefore, an anthropological problematic, a vantage point for making sense of the connections and disconnections, continuities and ruptures, subtractions and additions. As Arjun Appadurai points out (2016), no society or culture lacks a word for failure, being always presented through the prisms of language, context and tradition. He also notes how failure – or brokenness, in our case – tends to appear as a self-evident fact, even if it is most often a judgement made. Error, breakage and failure exist in different languages showing distinct nuances, reflective of the societies that produce them (Carroll, Jeevendrampillai and Parkhurst 2017), and yet the notion of failure and success currently hegemonic in the West seems to have been translated-imposed from the language of business. Our work and our minds are measured through financial models, ranging from credit ratings (a number 1) to investments (good for nothing). As a consequence, failure has been redefined, appearing not as an outright misfortune, but as an attribute of those behind the action, who become failures themselves (Sandage 2005).

No Future for Archaeologists

Fixing interventions combine an assessment of something from the past with a sought consequence towards the future. In its Latin etymology, *reparare* refers to a process that starts by going back, yet entailing two meanings: 'making ready' and 'paying attention to'. We can thus say that through repair both people and things grow new, not in the sense of being completely new again, but rather an experience of going through, of being reshaped and modified, having changed from one state to another, hence suggesting transition, intersection, transfer, transmission – a becoming with character (Haraway 2008). Sensuous engagements with the past and efforts to stitch things in time demonstrate the importance of repair as a form of passing through and carrying out (König 2013), thus healing entropic pathologies of desynchronicity (Rosa 2013).

In its etymology, also Latin, *obsolēscere* means 'to grow old', 'be accustomed' and 'to fall into disuse'. Nonetheless, things generate meaning not just in their preservation and repair, but also in their destruction and break-

age – as another mode of going through and being in time (DeSilvey 2017). Not surprisingly, the study of waste and decay is receiving increasing attention as a complementary critical angle for the study of consumption and production (Edensor 2005; Gregson, Metcalfe and Crewe 2007; Alexander and Reno 2012; Reno 2015; Eriksen and Schober 2017). Things break and technologies become obsolete much faster than ever before, showing that late-capitalism learned well how to make profit out of accidents. The way in which actual cycles of consumption triturate materials and resources makes us believe, however, that we can dispose of things with total impunity. Likewise, recycling cannot keep pace with increased production, becoming also part of the current 'accelerated archaeology' (Stallabrass 1996) that characterises capitalist rationality and the rapid turnover of commodities. Only repair keeps open the possibility of future remains and ruins; if we recycle everything, there won't be work for archaeologists and all traces would be reduced to a digital archive.

What Lays beyond Repair?

What happens when design and planning meet the material world? What kind of epistemological and ontological gaps are generated? When is the next unruly failure to arrive? Each breakdown entails an emergency and calls for being fixed (Larkin 2016). In a way, this is what we have done from Antiquity (Gruzinski 2012). The richness of repair practices contrasts, however, with paradigms of planning, as well as standardised design procedures (Orr 1996). As designer Ernesto Oroza (2009) points out in his study of vernacularly produced design work in 1990s Cuba, every repaired object can also be understood as a declaration of necessity, often a technologically disobedient one.

Everybody knows that not all that is broken can be fixed or recuperated. Yet sometimes we forget that there are things in a state of repair that keep working zombie-like, sophisticated systems of auto-repair such as the body, or un-failed technologies with no possible repair (i.e. floppy disks or DVDs). The questions of skills of joining and competences are also foregrounded in this book, as well as how things might provide remission but not repair, satisfaction without resolution. Repair is constitutive of a particular embodied thinking and web of connections, a 'cognitive mindset' of being able to assess a problem and identify an appropriate remedy in a given context (König 2013).

Further on, repair cannot happen without sensory explorations and intellectual speculations, in order to ascertain what the problem might be (Denis and Pontile 2014a). Successful maintenance always anticipates fail-

ures and entails abstract thinking (Dant 2009). In their interventions, repair workers rely on improvisation and accidental wisdom (Henke 2000), a making-do characterised by alertness, adaptability and celerity (Pine 2012). The work of repair also shows a complex repertoire of gestures and sensual knowledge that involves emotions and is distinct from the experience generated during industrial manufacturing (Dant 2009). Bodily practices such as repair that entail skilled work with different materials become ingrained in your mind (Sennett 2008). This process is part improvisation, part knowledge of standards, reproducing a normative description of the world (Denis and Pontile 2014b).

Efforts to fix generate particular infrastructures, networks and environments of everyday life that often become a condition of existence for those involved (Larkin 2016). A distinct knowledge emerges through repair, often pointing to a discrepancy between the sense of desire and possibility. Such embodied practice is ingrained within personal experience and shaped by the historical and cultural circumstances of its implementation. For artist Kader Attia (2014), repair is an ethical answer to guilt, but also a form of reappropriation and translation, moving things along, a sort of transfer from one cultural space/time to another performed through different acts or stages. To repair is, therefore, to connect – times, people, things (Gruzinski 2012); it is a contemporary writing of history (Gauthier 2014). Hence, it is imperative to project onto repair not only as corrective of obsolescence, breakdown, waste, negligence, subtraction and excess, but also an ideo-praxeological ethos for recuperating us.

The Pervasive Effects of Repair and Breakage

Brokenness reveals fragile relations between people, and that material injuries aggravate immaterial ones. The acts of fixing and mending contain emotional states of being attached to things. These interventions are both defensive (responding to scarcity and facilitating adaptation to changes) and generative (reconnecting and producing new kind of affects that then circulate in public). Also, repair can be dynamic, transforming or modifying the artefact for a new function; or static, trying to make the object appear as it was, to rehabilitate it according to its previous condition. Otherwise, what is broken is not destroyed but rather exists in a state of unfinished disposal (Hetherington 2004). As a verb, to break refers to something being separated, inoperative, scattered, uncompleted, fractured, torn down; it also refers to an escape, trespass, interruption, changing directions, termination, pause and delay of continuity; and finally to a state of bankruptcy, disregard, ruin, failure to function, and good luck.

Through an attention to ethnographic observations and reflections, this volume discloses what the dictionary obviates, namely that disrepair and fixing are part of a particular structure of feeling (Williams 1977), showing affective features of shame and cynicism, or care and solidarity in turn. The set of contributions illustrates the strong affective power hidden in situations of disrepair and repair; broken objects often bring strong emotions into play: frustration, disappointment, feelings of care and love as well as loss and shame, but also energising reactions of creative action. Repair is an open-ended process with no clear boundaries. It refers to embodied acts of completing things that stand in a stage of in-betweenness, engaging with signs of use and giving to disassembled pieces the opportunity for recovered meaning.

The selected authors have been invited to reflect on the social implications of repair and breakage, as well as how they are inscribed in material forms, highlighting the rather invisible relationships between order/disorder, wound/stitch, bone/plaster, hole/cork, and system/error. Despite some recent research in fields such as material culture and urban studies, scholars examining sustainability, the museification of everyday life and the changing notions of value have not yet sufficiently explored how breakage as a phenomenon varies culturally. Nor have they comprehensively scrutinised the importance of repair as an affective generator of haptic learning, symbolic meaning and socio-psychological behaviours. This collection therefore fills a significant conceptual niche within the humanities and social sciences by: 1) setting the general framework for a theory of repair and bringing about a better understanding of the socio-aesthetic significance of these practices; 2) testing the applicability of this concept in relation to the complex processes of transmission; 3) discussing how material culture differs and the ability to define what value can be; 4) investigating the ways that breakage can be anticipated in advance and hence predicting certain possibilities in distinguishing between early/late failure in a plan or system; 5) studying how social contingencies are not themselves projectless; 6) considering what needs to be fixed – is it the world, is it us, is it our way of living, or rather our idea of failure and success?; and 7) countering discourses of innovation, success and technological heroes with actual invisible practices of maintenance and repair.

About This Book

This anthology explores some of the ways in which repair practices and perceptions of brokenness vary culturally and, as such, influence wider

processes such as care-taking and projections towards the future. The idea of repairing herein appears as more than a technique; it entails responsibility, attention and a moral statement, making things visible and knowable (Puig de la Bellacasa 2011). Repair is considered as a cultural issue rather than simply a mindless mechanical procedure. This practice is part of a wider sub-architecture of maintenance, a backstage strategy to sustain social relations and constructions; without these reuse exchanges, skilled work and daily re-enactments of care, the world descends into dereliction (Sennett 2008; DeSilvey, Bond and Ryan 2013).

The volume also addresses how fixing and breakage have consequences for how we think about personal human prospections and retrospections. Rather than placing the emphasis on how infrastructures function, or how things get broken, our focus is instead on the affective responses to breakage and the vernacular ways of mobilising resources and generating value, often done as a patchwork of services and support networks without an active design or clear planning. During the editing process, we realised that some of these ideas would be better discussed if we provided authors with the possibility to contribute snapshots, which would then be placed between longer chapters. These shorter insights indeed help to explore many possible inter-articulations between knowledge and intervention, parallels between fieldwork and the practices of tinkering, as well as to acknowledge the role of anecdotalisation in the study of brokenness and repair. Likewise, the snapshot-chapter-snapshot structure relates to the research arguments about different material imaginings and the experimentality of social life, helping to better inform the volume by including topics such as breakage work on Chinese roads, digital telecare supporters in Madrid, consumption dilemmas with de-bobbling garments in Romania, clandestine repairers taking care of the Panthéon's clock in Paris, or a collection of puddles in different cities.

Overall, the book is organised in twelve chapters, intertwined with thirteen shorter snapshots. The variety in the length of each contribution type is also intended to break the textual monotony often present in such thematic compilations. The reader is taken through a wide range of situations and analytical understandings that go beyond the confines of specific disciplines. For example, we meet trash pickers in Istanbul, grassroots activists in Helsinki, people handling their belongings in London homes, luxury-watch repairmen in Hong Kong, a grandmother in Chile who stabilises kinship relations through object-maintenance, coin-operated elevators in Tbilisi, and a bike repair shop community in Brussels, to name just a few. At first glance, the range of examples could appear a bit too far-ranging and the number of topics included might seem chaotically eclectic. Never-

theless, much of the strength of the book lies precisely in this wide range of examples, because they illustrate the fascinating complexities of what is hidden behind labels like maintenance, brokenness and mending, making and breaking relations. The reader can emerge him or herself in a richness of settings, while appreciating the nuanced ways in which each text opens up a number of current theoretical and methodological debates in social and cultural research. The ways in which the contributions create a dialogue with a number of current interests in disciplines such as anthropology, sociology, STS and cultural studies also mean that it is a book of interest for several disciplines. Summing up, this volume shows the following key ideas:

- Social relations are sustained in relation to the maintenance and use of built forms; accordingly, the repair of broken and wasted artefacts helps to recover identities, histories and relations, thus broadening the considerations for the social and allowing a second opportunity.
- Any reparation has two dimensions: a practical attempt to fix what has been broken and the symbolic charge that honours care over wasting. Repair does not merely remake artefacts; the engagement with things shapes the social identities of the repairers and involves subtle shifts in the spatial, temporal, scalar and material processes, which, when combined, help constitute further social transformations.
- The act of breaking is contagious, generating the transmission of negative affects and a sense of failed relationship. Broken means damaged, in need of urgent attention, thus unusable for the initial design purpose.
- Brokenness is not meaningless; there is disordering power and an inherent energy level present in accidents, failures or mistakes, achieving what is understood as a breakthrough. Breakage is also a way of touching reality, of gaining direct access to our surroundings, of connecting to the ground. It thus harbours potentiality, becoming a catalyst, incentive or trigger for self-assessment.

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Note

1. The exclusion of the deviant (the noise, dirt, darkness, the negative and so on) informs us about a general order of things, which might, in turn, lead to negligence, discard, disinvestment or devaluation.

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