



Introduction

Fixing Motorcycles in Post-Repair Societies

This book is an exploration of the cultural location of maintenance and repair in contemporary societies. While they once held a more salient cultural presence, based on the active participation of consumers, maintenance and repair are often actively discouraged by manufacturers of cars, mobile phones and home appliances. The cumulative effects of planned obsolescence in the production of goods and services have resulted in the rise of throwaway societies and the shrinking of repair knowledge among users. Further, while political institutions and legal action often try to set limits on the long-term process of separating users and consumers from repair practices, the results are uncertain (Rosner and Ames 2014: 319; Forelle 2021). The European Parliament, for instance, is seeking to pass a right to repair bill, but with ambiguous results (European Parliament 2020). Similarly, in an age of glorification of technological innovation and techno-optimism, there are attempts to restore the cultural value of maintenance and repair and foreground the figure of ‘maintainers’ as a counterpoint to the myth-building of high-tech ‘innovators’ and entrepreneurs as cultural heroes.¹

In this book, I work with the notion of the post-repair society in order to highlight the cultural depreciation of maintenance and repair activities, the material barriers constructed around the joys and possibilities of repair in contemporary societies, and the relegation of repair to expert systems that diminish the cognitive and embodied technological skills of users of technology (Graham and Thrift 2007). The use of ‘post’ in the context of repair captures three transformations of repairs: the dissolution of the unity between biker and mechanic; the decrease in those possessing the knowledge, tools and desire to engage in repairing their bikes; and motorcycle

manufacturers' active discouragement of repair activities outside the financial and symbolic space of their dealerships. While there are still bikers who engage in repairing older, pre-digitized models, bikers who own newer, digitized bikes are limited to considerably simpler operations, such as replacing the oil or chain, and even that is discouraged (as shown in Chapter 3) by manufacturers through inbuilt material obstacles (proprietary screws and tools) and warranty restrictions. Although I convey a story of the decline of repair practices, I will show that the emergence of a post-repair society is a multidimensional process, generating side effects and configurations of technology, masculinity, gender and knowledge. These unexpected effects, some of which attempt to subvert post-repair logics, include new gender formations, stretching back to earlier historical moments, but also to new forms of agency aiming to resist the marginalization of repair and the dis-possession by manufacturers of technological knowledge from consumers.

In order to explore these themes, I have used motorcycling as an ethnographic entry point. Like cars, motorcycles are participants in the automobility system that break down and need repair. In this book, I assert that motorcycling (and in a general sense, car automobility) has been studied, to some extent, in a teleological manner, on the assumption that motorcycles are always 'on', functional and ready to be used. One may differentiate between 'being on motorcycles' and the 'doing of motorcycling' in terms of being moto-mobile and doing moto-mobility. The *doing* of motorcycling covers not only the movement and usage of motorcycles on the road, but also the way that motorcycling is socially produced, displayed and relational, and in particular how motorcycles are repaired. The doing of motorcycling is produced through trips, in the interactions with other members of the community and in the material interaction with the bike, but also through transportation infrastructure, such as roads, gas stations, meeting sites for bikers and service workshops. Bikers do more than simply ride their motorcycles; they listen to their sounds and smell them in order to detect malfunctions and anticipate potential breakdowns, and therefore maintain social relations with certified or informal mechanics, who help them when motorcycle malfunctions occur, alter their technical and aesthetic qualities and talk to other people about breakdowns. Like other technologies, motorcycling is constantly exposed to breakdown because of accidents, deficient maintenance practices, inadequate usage and even planned obsolescence.

The book highlights and challenges another assumption in studies of automobility that consider technology a constant variable in time. This assumption blinds researchers to the changes in and history of maintenance and repair practices. As technology changes, and with it the imagined users of that technology, the actors, heterogeneous networks and

material engagements involved in maintenance and repair also change. Despite being one of the most iconic, widespread and easy to understand maintenance and repair forms in contemporary societies, keeping automobile objects functional (motorcycles included) remains surprisingly understudied in both mobility studies and studies of breakdown and repair. Using these bodies of literature and drawing on ethnographic material from Romania, in this book, I approach moto-mobility as a sociotechnical entanglement that generates different subjectivities centred around maintenance and repair practices. Motorcycling selfhood emerges at the intersection of infrastructures, technologies and product design, takes on political qualities, invites material engagements and is generative of different subjectivities and orientations towards the future.

Motorcycling and bikers are particularly interesting and relevant to understanding the rise of, and resistance to, the post-repair society. As I will describe below, for many bikers, verifying, inspecting visually and even materially engaging with their bikes is almost a daily activity, representing a passion, functional necessity and source of meaning in their lives. Along with being used, motorcycles require care and frequent maintenance; storage during the winter months, when it is too dangerous and too cold to ride them; certification by transportation authorities; and investments in protection gear. Most studies focusing on moto-mobility emphasize identity construction, but downplay the labour, technical knowledge and social practices that reproduce that identity construction. In foregrounding these material and technological dimensions of motorcycling, I seek to recover and describe how people tease out, embrace and transcend the limits of the post-repair society. In doing so, I have populated this book with a variety of sites and actors, which include road infrastructures, mechanics, service shops, replacement parts shops, transportation bureaucracies, gender mediations, circuits of technical knowledge and narratives about repair solutions among bikers. All these sites outline what it means to practise motorcycling, beyond the short periods of time when bikers actually ride their bikes. These para-riding motorcycling practices are central to understanding how maintenance and repair function in contemporary societies.

To highlight the labour and relations that go into making one's motorcycle a functional object, I took interest in the work of several scholars who have attempted to integrate technology and objects into the daily interactional order and world-making processes (Dant 2004; Orr 1996; Latour 1999). Although one study discusses cars, the same goes for motorcycles, in that 'the driver-car is neither a thing nor a person; it is an assembled social being that takes on the properties of both and cannot exist without both' (Dant 2004: 74). Unlike Dant, however, I suggest that the biker-motorcycle assemblage also incorporates the persons and things that

support maintenance and repair, such as other bikers, mechanics, trust, deception and (the performance of) technological knowledge and mastery. Motorcycling thus emerges as a bundle of social and technological relations that generate different subjectivities emerging from the changing practices of maintenance and repair, since moto-mobility involves relationship infrastructures, technologies, political power, knowledge, product design and riders' subjectivities. The post-1990s digitization of motorcycle engines has dramatically limited the technological intimacy of motorcyclists, their knowledge of technology and their material engagement with their motorcycles, and this book offers a detailed ethnographic account of the transformations induced by digital technological changes and describes how the rise of post-repair moto-mobility has brought to the fore new forms of material engagements and subjectivities.

Besides enriching the literature on maintenance and repair, this book speaks to the sizable interdisciplinary work on motorcycling. Thus, it covers the ways that the experience of and the worlds formed around motorcycling are intimately linked to maintenance and repair. The absence of repair is a gap in the studies of automobility in general and of motorcycling in particular. Most studies on motorcycling and automobility have tended to focus on production, consumption and usage, and lifestyle. Social theory, as Graham and Thrift (2007) suggest, has been largely inattentive to repairs and maintenance. Although the functioning of modern societies is facilitated by continuous processes of maintenance and repair, mobility studies have been largely inattentive to their importance in sustaining technical systems, identities, and forms of sociability. Turning to how motorcycles have been repaired by their bikers, I foreground this key aspect of mobility through a historically informed and ethnographic study of the technological changes in motorcycling. This is especially critical for motorcycling, which is often associated in its public representations with technological skills. One study has noted that 'many motorcyclists are involved with the maintenance, restoration and customization of their machines, and this plays a large part in the attraction of motorcycling for the mechanically minded' (McDonald-Walker 2000: 17–18). Bikers often see themselves and others as 'gear heads', possessing more technical knowledge than the average car user (Holmstrom 2002). Although there are occasional references to the role of maintenance and repair in the lives of different biker groups (Benesch 2010; Ward 2012; Lagergren 2007; Litton 2008), they underplay the effects of the technological qualities of motorcycles on the nature of mobility. I build on Urry's (2007), Graham and Thrift's (2007), Pinch and Reimer's (2012) and especially Crawford's (2009) insights into the location of maintenance and repair in our contemporary economies, which are dominated by digitization and expert systems.

Paying more attention to the technological qualities of engines and, correspondingly, to maintenance and repair practices has substantial implications for the way we conceive the history of mobility, which is considered a key factor in the configuration of the different stages in one or more inherent processes, such as consumption (Gartman 2004), class (Halnon and Cohen 2006) and the organization of production (Cenzatti 1990). Conducting an analysis from a technological vantage point, one gets a different understanding of automobility and moto-mobility. I suggest that the history of automobility falls into two stages from the point of view of cars' (and motorcycles') maintenance and repair logic.

The first is the carburetion era, which began in the late 1800s and lasted until the 1980s. The carburetion era was based on a limited separation between the identities of biker and mechanic, on collective repairs, on the agency of owners, and on the limited autonomy of motorcycles themselves. The injection era, which began during the late 1980s and continues to this day, has heightened the role of expert-system-based, computer-assisted, brand dealership repair shops. The digitization of motorcycles created a technical, physical and symbolic separation between motorcyclists and their motorcycles during repairs that both limited bikers' agency and heightened functional autonomy. This period also includes signs of the emergence of the post-injection era, characterized by bikers' regressive search for agency, a symbolic and functional return to carburetion, and experiments with 'post-carbon' motorcycles, which will multiply with the dawn of the current historical cycle of carbon neutrality.

Although the interest in maintenance and repair is growing, the scope of the scholarly literature on automobility in general and moto-mobility in particular has not caught up with the interest in these topics. Two of the most recent publications gather together several ethnographies of repair in various areas of society, but none covers motorcycling, which would be an ideal site of investigation (Strebel, Bovet and Sormani 2019; Martínez and Laviolette 2019). There are also studies that approach crafts and repairs as middle-class activities that create social identity and heighten one's agency (Sennett 2009). Many of their insights have been useful for my analysis; as such, material interactions inside the motorcycling community are intertwined with consumption in meaningful ways. On the other hand, my ethnographic data suggests that crafts and repair activities are not just middle-class soul-searching in a social world of plenty, like those that seem to populate Crawford's (2009, 2011) analyses. To give just one example, as I have described in the first and second chapters of this book, until recently, repair practices in Romania were strongly linked to a shortage of spare parts and the difficulty of purchasing replacement parts, which has generated intense exchanges of gifts, horizontal ties inside bikers' communities

and the informal crafting of replicas, thus challenging the assumption of an abundance of financial resources that underwrites middle-class crafts.

Surprisingly, studies on motorcycling, although they have highlighted bikers as persons and communities, have ignored motorcycles entirely, and, implicitly, biker–motorcycling–repair assemblages. As a technological object in need of maintenance and repair, motorcycles are objects with connective capacities, rather than merely technological properties, thus participating in extended heterogeneous networks. Research on motorcycling has thus neglected the technological aspects of motorcycling, and in turn, motorcycles’ repairs. This has left the rich sociability formed around maintenance and repair unexplored. All the social processes involved in the social relations, identities and gendered processes in which motorcycling participates are also technical and, implicitly, maintenance and repair-based processes. This invisibility of technology is perhaps more surprising since motorcycles (like cars) are often present in mass culture, unlike other forms of technology, as instances of technological sublime that blur the boundaries between technology and aesthetics. One may notice the latter fact in the publishing of coffee-table books that gather splendid photos of motorcycles, famous makes and brands; motorcycling histories; memoirs of famous bikes; travel books; and films and novels that prominently feature bikes (Alford and Ferriss 2006).

A large number of scholarly works have focused on moto-mobility, including histories of bicycles and motorcycles (Alford and Ferriss 2007, 2016), motorcycling lifestyles (Alford and Ferriss 2007; Thompson 2012), motorcycling ‘as a nonspatial community’ (Maxwell 1998: 263), female Harley-Davidson bikers (Joans 2001), motorcycling as a social movement (McDonald-Walker 2000), biker outlaws (Librett 2008; Wolf 1991, 2000; Veno 2007), motorcycling and existentialism (Bourne 2007; Pirsig 2005), motorcycling and social stratification (Truitt 2008; Halnon and Cohen 2006), motorcycling, consumption and the body (Halnon and Cohen 2006), motorcycling and masculinity (Mellstrom 2002, 2004; Nyanzi et al. 2009; Carroll 2008) and motorcycle and risks (Maxwell 1998; Natalier 2001; Brogton and Walker 2009; Bellaby and Lawrenson 2001). Although I have used many insights from these fascinating studies, in my book, on the other hand, I have centred the analysis on technology, considering it as a key factor that has transformed motorcycling culture and bikers’ subjectivities. I predominantly analyse such representations through ethnographic data and interview data, highlighting how the practices of maintenance and repair and sociability, the technological characteristics of motorcycles, and political power have produced specific social ties between bikers during the carburetion era, and how the digitization era has led to post-repair practices, the dissolution of former ties and the emergence of

new subjectivities. All the popular books mentioned above, however, seem to pay little attention to the epochal technological change introduced by the digitization of motorcycles, which has black-boxed contemporary bikes in terms of maintenance and repair.

Thus, this book makes three contributions to mobility studies. First, it shifts the gaze from cars, which dominate most studies on automobility, and thus pays more focused attention to moto-mobility, a key component at different moments in the mobility system. Second, considering previous studies on motorcycles, the book shifts the accent in understanding motorcycling worlds from the non-technical dimensions of motorcycling to the way that technology sometimes determines, becomes entangled with and is often transformed within bikers' worlds. Third, I suggest that, at least for bikers, maintenance and repair are not simply something to be performed to keep an object functional. Maintenance and repair emerge as social bonds, as ways of authoring selves and communities, as a political technology and social movement, and as ways of knowing others.

Motorcycling was a familiar presence in my early life. Back in the 1980s, one of my uncles had a Romanian-produced Mobra, which he used primarily for daily commuting to his job in a city some 30 km away from where I lived. An older cousin of mine also rode a bike. My father, who worked as a field supervisor in a wine-producing company, also used a motorcycle for field trips. My father's company owned a Dnepr MT-10 sidecar produced in Ukraine, and I often rode in it as a child. Although I began driving when I reached the age of 18, the legal limit in Romania, I was not interested in motorcycling, either personally or as a research topic, until a decade and a half later.

As this is an ethnographic work about mobility, this book combines 'sedentary' and 'mobile' methods (Büscher, Urry and Witchger 2011). Much of the data was collected through my own observations of biker meetings, trips with other bikers, independent service shops and brand dealership service shops. Another source of material is field interviews and semi-structured interviews with bikers whom I came to know better, as well as amateur and professional mechanics. I became interested in motorcycling in 2006, when I was 32 years old, and decided to work towards obtaining my driver's license. That same year, I purchased my first bike, a 250 cc Kawasaki Eliminator produced in 1992. Although I felt that it was a rather small bike, I purchased it primarily because of my instructor, who insisted that we first purchase small-engine bikes. The next year, I also purchased a Ural Wolf 750 bike, produced in 2006, a Russian bike that some of my biker friends described as solid and easy to repair. Later on, I purchased an expensive 2009 Harley-Davidson Crossbones, which I kept until 2021, at which point I sold it and purchased a 1990 Yamaha Super Tenere. Since

2006, each year, primarily between April and November, when the weather in Romania allows safer and more comfortable bike travel, I have taken trips of up to 400 miles, sometimes alone, at other times with a close friend, and sometimes in groups of four to nine bikers after joining a motorcycling club. I occasionally attended two or three larger biker festivals outside Bucharest, and attended bikers' meetings in Bucharest almost weekly.

Additional data comes from my own experience with the maintenance and repair of motorcycles. I have had a technical knowledge of cars since my late teens, and I was always able to repair the different parts of my cars, or at least diagnose problems, carry out informed conversations with professional mechanics and be in a position to co-construct technical diagnostics on the various cars and bikes I have owned. In 2012, I attended a mechanics class and became a certified mechanic after five months. The course attracted young working-class men who sought to work in car and motorcycle repair service shops. I draw on that experience in various parts of the book, but also on what I learned from the instructor of that course, whom I befriended. In 2020, I attended another non-certified mechanics course aimed at a different audience, formed of middle-aged, skilled service-sector workers who owned bikes and wanted to learn more about them. Additionally, I have read many posts on biker forums, joined friends in their trips to purchase bikes in order to give advice about the technical soundness of the bikes, and travelled to help friends whose bikes had broken down and were left idle by the side of the street, both in Bucharest and outside it.

Similarly to other scholarly work on motorcycling, this book uses a variety of sources ranging from autobiographies, popular accounts on motorcycling and bikers' magazines to official statistics, interviews and observations. I estimate that I have interviewed about 110 bikers, of whom about eighty were male, including amateur and professional mechanics, while the rest were female. I have also had many other casual conversations with participants at biker meetings in Bucharest and other locations in Romania about their bikes and how and where they repair them. Since I became interested in motorcycling, I have also got to know several motorcycle sale representatives and dealership managers, and I have also observed amateur mechanics carrying out repairs at home and wherever bike breakdowns occurred. Although the issues discussed in this book are not sensitive for my interlocutors – on the contrary, many insisted that I write about them as they knew that I had published articles on motorcycling before – I have used pseudonyms throughout the text to ensure confidentiality.

The book opens with an overview of motorcycling in Romania. Chapter 1 offers some general data on the number and the evolution of bikers in that

country, including the shifting frames of bike imports during the Second World War, primarily from Germany and over the following two or three decades from the USSR. It discusses the rise of domestic production of bikes; the importance of motorcycling during the 1950s and 1960s in the landscape of automobility practices relative to cars and in the mobility of low level state public servants; the changing cultural locations of biking, from neutral to state-supported, during the first two decades of state socialism; biking's marginal and deviant connotations during the 1970s and 1980s; and the rise of leisure biking, the decline of carburettor bikes and the rise of injection bikes since the 1990s.

Chapter 2 is an in-depth discussion of the maintenance and repair of carburettor bikes, the only type of motorcycle that existed until the late 1980s throughout the world. Although these bikes are being replaced by injection bikes, there are quite a few of them still in use. The same is also true in Romania, where, by my estimates, four in ten bikes currently registered are carburetion-based. Regardless of their number, such bikes are a window into current and past repair practices and biker subjectivities formed around the unity between riding and repairing bikes. As they were relatively accessible technologically for many people – in fact, massively accessible by the current standards of injection bikes – their maintenance and repair was frequent, collectively managed and imaginative. The alterations and transformations of such bikes were also mass activities among bikers, rather than operations performed by specialized mechanics. Some concepts that helped me conceptualize the ethnographic material include 'repair aesthetics', by which I convey how bikers with older bikes feel invited to repair such bikes with exposed engines; 'repair standby', which captures the sensorial and cognitive attunement of bikers to early signs and their anticipation of coming breakdowns; and 'pan-repair', that is, the blurring of maintenance and repair on the one hand, and the creation of new objects through substantive material transformations on the other.

Chapter 3 describes the tectonic shift from carburetion to digital injection bikes that unfolded in the 1990s and created the first post-repair subjectivity (i.e. the rise of a-technical bikers, who, unlike those of the pre-injection era, are neither interested in nor knowledgeable about repair). Even if bikers with digitized motorcycles are, to some extent, curious about maintenance and repair, they cannot repair their bikes any longer. That change in the technology of the engines has not only transformed the engines themselves, but also the nature of biking, and in particular, the ability, openness and knowledge required to sense and address malfunction. Entry-level bikers stopped needing to acquire technical knowledge and seek out the company of other bikers for repair mastery and their own improvisations. Instead, specialized brand dealership service shops erected

material, knowledge and contractual boundaries between bikers and the bikes that they own and ride, which are materially (and legally, through warranty stipulations at least) inaccessible for maintenance and repair.

Chapter 4 and Chapter 5 turn to another effect of post-repair society – the rise of women bikers. Largely unanticipated, the new, digitized configuration of fuel-injection systems used in current bikes has reduced some of the cultural and technical barriers that precluded women from entering the world of motorcycling. Since its inception, motorcycling has been a heavily gendered field, mainly dominated by men. As riders, motorcycle mechanics and pop culture figures, men have marginalized and stigmatized the presence of women in motorcycling. When men allowed women near motorcycles, it was as partners relegated to the passenger seat, rather than riders, and even less so as maintainers and repairers. In Chapter 4, I describe how the subjectivity of women bikers has emerged, which areas of motorcycling have opened up to women and which have remained predominantly masculine. In the same chapter, I also note that although the genesis of the intention to ride, certification and the riding itself have become more gender-neutral, the acquisition of bikes, and in particular the maintenance and repair of bikes, remain male-dominated. To capture this enduring male character of maintenance and repair, I work on the notion of ‘significant repair other’, by which I mean men who handle the maintenance and repair of women’s bikes on their behalf. The delegation of repair labour to significant repair others may be total or partial; hence, in Chapter 5, I present at length four women who maintain and repair their bikes as a way of presenting four gendered configurations of maintenance and repair activities in the post-repair society. I note that some women completely transfer any maintenance and repair activities and interaction with repair shops to the men who are present in their lives, while some, especially those who own carburettor bikes, seek to gain more technical autonomy from repair shops. I note that such configurations intersect with seniority, the size of the cities where the women live (which translates into the number of mechanics available), financial considerations and aspirations for female autonomy. The role of women bikers in maintenance and repair spaces also varies, from junior apprentices to activities that ensure social reproduction through administrative and indirect technical activities, such as accounting and cooking food.

Chapter 6 returns to some of the themes articulated in Chapter 3, nuancing and deepening some of the themes surrounding digitization, bikers’ shrinking technological knowledge about their bikes and the prevalence of expert systems that take over diagnosis and the repair of bikes. The chapter explains that although the digitization of motorcycles has encouraged the emergence of a-technical bikers, being technologically savvy – or

at least desiring technological knowledge, aspiring to it and projecting it to bikers and non-bikers – continues to have a high cultural value. Taking a bike mechanics introductory course as an ethnographic entry point, I discuss how dirt and what I call ‘repair talk’ – overperforming one’s technical knowledge – are central to the way that maintenance and repair have been relegated to the status of a hobby, activism, and a regressive form of agency and contestation of the post-repair logics of black-boxing consumer technological objects, bikes included.

Note

1. See the website of the global research network the Maintainers for an example: <https://themaintainers.org/> (accessed 10 August 2022).