Change by Changing Smartphone-Users?
The Fairphone as an Experimental Sid/te

Isabell Otto

The Virtue of Fair Smartphone Practices

"This is not a phone. It's an opportunity to change the industry" – "The phone that cares for people and planet" – "Change is in your hand".[1] With slogans like these the Dutch company Fairphone promotes their fairly, modularly produced smartphones – the Fairphone. Following the company's intention statement, this 'change', has two implications. Firstly, Fairphone B.V. is invested in transparent, pro-social production chains. They seek to make a difference by avoiding components sourced from problematic labor conditions, e.g. child labor; obtaining integrated resources like tin, tantalum, or gold from mines that are not financially entangled in civil wars or other conflicts. Secondly, the modularity of the fair smartphone means its users can repair or upgrade parts themselves by ordering and replacing each individual component.

Fairphone calls on their customers to resist the smartphone-industry and its standard, non-durable devices that are harmful to the environment, through practices of tinkering and rebuilding. The Fairphone is not only 'fair' in terms of fair trade but also because it invites users to secure a long lifespan for their phones and thereby conserve natural resources. However, these ideals are not easily achievable. Fairphone founder, Bas van Abel, has noted arising "dilemmas when you want to change an industry that you are a part of" while attempting to produce profitable products: "If you try to do things differently you run into every single wall that this system has to offer." (Garrigou 2018) The demands of customers to participate in the fair and environmentally sustainable practices of Fairphone's business model follow similar dilemmas: Users are invited to join the commodity circle by buying smartphones or phone-modules and thus securing Fairphone's profit. At the same time,

1 The first Fairphone slogan was announced in 2018 (https://web.archive.org/web/20180914145416/https://www.fairphone.com/en, September 14, 2018), the second is part of the campaign for Fairphone 3 (https://web.archive.org/web/20190919034911/https://www.fairphone.com/en, September 9, 2019), the third is a general tag line, i.e. printed on the Fairphone's battery.

they are requested to resist the smartphone industry (including Fairphone B.V. and its profit orientation). Fairphone's business strategy shows that resistive practices and (economical) power structures are inseparable form each other. Additionally, the subject formation within and by these practices – in our case: the becoming of a 'Fairphone-user' – at the same time paradoxically endangers her subjectivation as 'smartphone-user', which I want to understand (and explicate below) as a 'hybrid actor' (Latour 1994: 33) with reciprocal bonds, or 'attachments' (Hennion 2017) between human and device.

The complex entanglement of resistant practices and subject formation is elaborated on by Michel Foucault in his late writings on "The Subject and Power" (Foucault 1982) and reflected by Judith Butler in her discussion of Foucault's concept of "Critique" as a specific form of resistance or rather: a special virtue of the subject. (Cf. Butler 2001; Foucault 1997) According to Foucault, power and resistance are so closely intertwined that, in his proposition to study power, he suggests using resistance as "a chemical catalyst so as to bring to light power relations". (Foucault 1982: 780) Investigating resistant practices or "attempts made to dissociate these relations" can thus show, "what power relations are about". (Ibid.) Foucault is not interested in resistance to a certain authority or in an opposition to a concrete institution of power, but in withstanding a general "technique" of power "which makes individuals subjects". (Ibid.: 781)

Thus, what is brought to light by discussing Fairphone's claim for fairness? Following Foucault, it is not so much the (resistance against) power structures of the smartphone industry but the struggles of the individuum within power relations of the smartphone production cycle and accordingly the struggle with its subjectivation as a smartphone-user. The calls to change the industry are of less importance here than the demands on users to change themselves. The practice of 'critique' in Foucault and Butler's perspectives is significant for describing this change in the self: "To be critical of an authority that poses as absolute requires a critical practice that has self-transformation at its core." (Butler 2001: 5) When Foucault and Butler describe the transformation of the self in and through practices of critique, they are not simply concerned with resistance but with a certain virtue which has both ethical and aesthetical implications: an "art of voluntary insubordination, that of reflected intractability" (Foucault 1997: 47; cf. Butler 2001 5, 6) or even a performance of "self-stylization" (Butler 2001: 10), a "release from its usual discursive constraints" (ibid.: 9), which has nothing to do with a foundationally resistant 'nature' within an ontological subject.

This theoretical framework also touches questions that arise with the abovementioned dilemmas of Fairphone-users and allows positing them more precisely. How can we rethink the demand on customers to simultaneously participate and *not* to participate in the commodity circle of the smartphone industry as a specific positioning of the subject in assemblages of power? As Foucault argues, the mean-

ing of 'subject' is twofold: "subject to someone else by control and dependence; and tied to [their] own identity through a conscience or self-knowledge. Both meanings suggest a form of power which subjugates and makes subject to." (Foucault 1982: 781) Resisting this form of power accompanies not only an artful attitude of knowledge and awareness of the power relations the subject is bound in; the subject also risks its "very formation as a subject", (Butler 2001: 8) because the production of the subject is bound to the very norms its attitude of critique opposes to: "[I]f the selfforming is done in disobedience to the principles by which one is formed, then virtue becomes the practice by which the self forms itself in desubjugation, which is to say that it risks its deformation as a subject". (Ibid.: 10)

In this chapter, I want to reflect on resistant practices that the Fairphone enables and demands as forms of sid/te-taking. The core of my argumentation is the attachment of smartphone and user as a subjugating technique of subject formation within the power relations of smartphone industry. Which constraints can a fair smartphone-user artfully release and what are simultaneously the risks of her attitude of critique?

The Site-Taking of Smart Phone Users

The taking of public places as political resistant practice is closely linked to the visions of collectivization by mobile phones, especially in the early phase of their distribution. One of these visions is phrased by Howard Rheingold in his book *Smart Mobs* from 2002. He defines 'Smart mob' with the term "Mobile Ad Hoc Social Networks", brought up earlier by computer scientist Gert Kortuem and others (2001).[2]

One prime example for the potentials of a smart (phone) mob in Rheingold's argumentation is a historical event in the Philippines: "On January 20, 2001 President Joseph Estrada of the Philippines became the first head of state in history to lose power to a smart mob." (Ibid.: 157) Within one hour, after a text message with the call "Go 2EDSA, Wear blck" had been initially sent, more than a million citizens assembled on Epifanio de los Santas Avenue (EDSA), a historical site of a much earlier, peaceful demonstration in 1986. The precondition for this event was the

2 "Both terms describe the new social form made possible by the combination of computation, communication, reputation, and location awareness. The mobile aspect is already self-evident to urbanites who see the early effects of mobile phones and SMS. Ad hoc means the organizing among people and their devices is done informally and on the fly, the way texting youth everywhere coordinate meetings after school. Social network means that every individual in a smart mob is a 'node', in the jargon of social network analysis, with social 'links' (channels of communications and social bonds) to other individuals." (Rheingold 2002: 169f.)

early and large distribution of mobile phones in the Philippines and a special relationship between user and device, which historian Vincente L. Rafael calls 'manic', describing it as an over-identification with the phone:

> "The 'manic' relationship to the cell phone is just this ready willingness to identify with it, or more precisely with what the machine is thought capable of doing. One not only has access to it; by virtue of its omnipresence and proximity, one becomes like it. That is to say, one becomes an apparatus for sending and receiving messages at all times." (Rafael 2003: 403)

Since the mobile phone can be "idealized as an agent of change, invested with the power to bring forth new forms of sociality" (ibid.: 402), an envisioned ability to act as part of a powerful crowd arises in the 'cell phone-user' from this manic relationship, instilling the potential to change the political system.

The observation of an intimate attachment with the mobile phone is not confined to Philippine media culture. For the western world, a similar binding was described by Sherry Turkle, with the notion of the 'tethered self' (Turkle 2008). Along with her intimate relationship with the mobile phone, the user gets a personal address that goes hand in hand with the potentials and demands of being always and everywhere connected and available (cf. Linz 2008) – a hybridization of human and device that even intensifies through the internet connectivity of smartphones. In Foucauldian terms, one can argue that through the attachment (cf. Hennion 2017) of mobile phone and user, human individuals become subjectified as 'mobile phone-users'. They not only become tethered to their phones but are also tied into social, technical, political, and economic power relations.

Seen in this light, the imagination of the smart mob that overturns a political regime neglects this enmeshment of the mobile phone-user. It conceptualizes the phone as a powerful tool or: a handy vehicle for resistant communication that enables a revolutionary site-taking. At the same time, the 'smart mob imagination' disregards the mobile phone as a 'site', that is itself steeped in power relations. The Philippine example is especially evident here: The Philippines are among those countries providing the electronic industry with child-mined gold that is built into mobile phones and other electronic devices because of its qualities as a conductor of electricity.[3] In comparing the 'smart mob' to the 'fair phone imagination' of change we can recognize the difference between political resistance and resistance as 'critique' in Foucault's terms. Political resistance concerns the mobilization of

3 The report *Gold from Children's Hands. Use of Child-Mined Gold by the Electronics Sector* (Schipper/de Haan/van Dorp 2015) states: "The quantities in each device might be small, but they add up to a large amount of gold. In 2014, more than 1.2 billion smartphones were sold worldwide, containing 37,347 kilos of gold." (10)

people using mobile phones as a dynamic communication channel. Critique concerns the subjectivation of the mobile phone-user, her own involvement in power relations and the virtue to care about herself and others in this relatedness. The 'smart mob imagination' states the mobile phone as a means, the 'fair phone imagination' challenges it as a mediator, that changes all involved entities (cf. Latour 1994).

Siding with Smart Pigeons and Fair Gold Miners

But to close the gap between Foucault's virtue of the self and Fairphone's work against oppressing labor conditions or environmental pollution we have to regard another theoretical position and another exampleUS-American biologist, philosopher of science and literary scholar Donna Haraway pleads for *Staying with the Trouble*. In the face of environmental disasters, climate change, and species extinction, Haraway seeks ways to "live and die well with each other" (2016: 1) on a damaged planet – beyond despair and hope. 'Making kin' is her slogan-like approach to the problem. What she has in mind are not the genealogical or biogenetic kinships. Instead, she calls for demonstrating, enduring, and redesigning the close relatedness of humans, plants, animals, and technologies. Haraway's books are known for their provocative, fabulous, and exaggeratedly formulated programming. In *Staying with the Trouble* she is anxious to counteract an exceptional human position. Instead, she emphasizes a "multispecies becoming-with" (ibid.: 10) that enables a mutual empowerment, a partial recovery, a revival of destroyed habitats for going on together. For this utopian-visionary draft Haraway chooses the term 'Chthulucene', which refers less to an era than to a place of time, a "thick present" (ibid.: 1). The book has an obvious activist gesture: "Living-with and dying-with each other in the Chthulucene can be a fierce reply to the dictates of both Anthropos and Capital", (ibid.: 2), Haraway says introductorily.

In her speculative fable, Haraway refers to examples from artistic and scientific activism. The Cat's Cradle becomes a guiding figure for a practice of resisting, writing, and thinking. Similar to a network of string figures that are passed from hand to hand and change in the process, people are variably connected to kindred non-human things or beings. Through this line of thought, Haraway also calls for a way of thinking that connects the most diverse elements with each other and invents new stories with open ends which can be enmeshed further and further. Thus, her book also aims at the invention of new research practices and explores them in numerous examples.

One of Haraway's cases is presented here in detail because of its similarities the 'fair phone imagination'. PigeonBlog is a project that artist, activist, and scientist Beatriz da Costa carried out in the summer of 2006 as a collaboration of racing pi-

geons, artists, activists, engineers, pigeon fanciers, and do-it-yourself electronics. The project is an environmental activist experiment. It aims to collect data on urban air pollution in California and publish it on the Internet. In addition, the goal is to promote resistant practices through cross-species co-production. (Cf. ibid.: 16-29; da Costa 2008) Haraway discusses PigeonBlog as a way to facilitate recovery from fundamental environmental damage. It is about repairing polluted neighborhoods and social conditions, she argues, people and racing pigeons enable each other reciprocally through an intimate connection with communication technologies. (Cf. Haraway 2016: 20) In months of development work, the pigeons are fitted with backpacks containing various modules that are also built into mobile phones, as da Costa explains:

> "The pigeon 'backpack' developed for this project consisted of a combined GPS (latitude, longitude, altitude) / GSM (cell phone tower communication) unit and corresponding antennas, a dual automotive CO/NOx pollution sensor, a temperature sensor, a Subscriber Identity Module (SIM) card interface, a microcontroller and standard supporting electronic components. Designed in this manner, we essentially ended up developing an open-platform Short Message Service (SMS) enabled cell phone, ready to be rebuilt and repurposed by anyone who is interested in doing so." (Da Costa 2010: 35; cf. Haraway 2016: 21)

According to Haraway, the project tries to enable cross-species trust and knowledge so that the connection between birds, technology, and people can actually be fabricated. This takes time and must be done carefully, in learning processes of all participants, e.g. with "lots of fitting sessions and balance training in lofts" (Haraway 2016: 22) and overcoming objections of animal protectionists. But then, according to Haraway's positive reading of the project, arises a mutual empowerment for care and responsibility: The official apparatus for measuring air pollution in California is installed in such a way that it cannot fully comprehend the health impact on humans and other living beings. In contrast, technologically advanced smart pigeons with their "multispecies team" are able to collect data continuously 'on the fly', even at critical altitudes or near the ground. They "trace the air in string figure patterns of electronic tracks" (ibid.): The data can be published and visualized in real time on the pigeon's 'blog'. The visualization of pollution areas by the pigeon data can thus also show social inequalities in the habitation of damaged habitats.

But the dynamic network of relationships has an openness that can become problematic. PigeonBlog was conceived as an environmental-activist project, but its reception has not only been understood in this sense. In the course of the great public response to her project, da Costa also received an offer from an engineer to jointly submit a research proposal to the Defense Advance Research Projects Agency (DARPA) for the development of flight monitoring devices modelled on pi-

geons. The great openness of the project makes it suitable even for military contexts. (Haraway 2016: 22)

What it makes instructive for me to compare PigeonBlog in Haraway's perspective with the strategies and tactics of the Fairphone is an aspect both cases have in common: the work on the technological connection between humans and other things or beings that is directed against standardized industrial default. While Fairphone invites their users to open, disassemble, repair, and reassemble the black box smartphone, Costa assembles modules of mobile phone technology and expands pigeons into partial phones. Both examples take the mobile phone as a building site, as an experimental constellation. These steps are taken before every form of resistant sid/te-taking – e.g. against the pollution of underprivileged neighborhoods or the harmful work of children in gold mines. Using Haraway's view of the PigeonBlog and the critique made by Fairphone resistance we can further clarify that: In the virtue of critique the power relations of the mobile phone are not taken for granted but contested in an experimental taking of the phone as a building site. This is not a simple opposition in the sense of a binary antagonistic gesture. The user-subject experiences itself in a confusing network of various kinships, where changing a situation can only mean to make new kin and to transform the self, likewise.

Outsmarting the Smartphone?

Let us have a closer look at the Fairphone as an experimental building site in order to better understand, what transformation of the self in this framework could mean. Opening Fairphone's black box can be described as hacking. Hacking is a practice of transformation, a reformatting of systems, structures or constellations by testing and actualizing previously only virtually available possibilities. In this respect, hacking is not an oppositional resistant practice, but a playing with possibilities and system states that have not yet been put in effect. According to media studies scholar Claus Pias, the hacker is an ambivalent figure, both subversive and state-supportive. Hacking oscillates between data theft and protective practices against governmental or corporate interference in the private sphere. (Cf. Pias 2002) Practices of hacking have been developed in historical situations of programming digital computers. However, the term 'hacking' has now been transferred – almost inflationary – to different cultural and social areas. In this broader sense, hacking generally refers to the changeability of routine processes in politics, culture, and society. (Foit/Kaerlein 2014)

Fairphone's strategies in this broader sense can be described as hacking of the smartphone industry. The production of fair and sustainable smartphones should increase the demand for these devices and thus transform the industry as a whole.

What makes it plausible to describe this cooperate strategy as hacking is a circumstance mentioned by Pias: The hacker is located at the border between the visible and the invisible. Hacking shifts the boundaries of the inaccessibility of digital computers. It makes data and processes transparent, brings secrets to the public, and thereby creates new areas of secrecy. (Cf. Pias 2002: 254) This also applies to the smartphone, which is, among other things, a mobile digital computer. In this sense, Fairphone is pursuing the idea of hacking by strategically linking the transparency of production chains with the openness of the device. Fairphone reveals the blueprints of their devices as well as the source codes of their software. It is transparent both in terms of open source hardware and software and ethics. In its corporate strategies, Fairphone combines ethics with hacker ethics of open access and free information. (Cf. Levy 1984)

With this concept the small Amsterdam company literally invites its users to undertake hacker practices. Every Fairphone 2 comes with a default open operating system based on Android, originally developed by Google. The operating system Fairphone Open OS enables the users to get the so-called 'root rights' over the smartphone, that is to get almost complete access to the system. The users thus become 'superusers'. On an online platform about IT security, developer Rascal Privy demonstrates that by this makes it possible to bypass Google's default settings and, for instance, to install an Internet browser on the Fairphone via an alternative provider of software products, which protects user privacy, and does not collect any data about visited websites or online purchases. (Cf. Privy 2017) According to the blog's announcement, Privy's experience report is not only helpful for "Fairphone enthusiasts, but also for users who want to free themselves from the 'tentacles' of the big data collectors". (Ibid, trans. IO) Accordingly, a Fairphone includes the necessary tools with which its users can counter the grasps of the smartphone industry with resistant practices.

The company's request for users to repair their own Fairphone is similarly perceived by hardware hackers and electronics hobbyists as an invitation to redesign. On the site of the collaborative hardware development community HACKADAY.IO, Christoph Kirschner posts a manual entitled "Hacking a Fairphone", in which he describes how the mobile device can be extended by three capacitive keys, i.e. keys that react solely to touch, and how the access possibilities of the phone can thus be specified. The open development environment of the Fairphone is the necessary prerequisite here, too. (Cf. Kirschner 2018) The Dutch electrical appliance manufacturer Aisler publishes Kirschners do-it-yourself project in the form of an AISLER Genius Box, which includes everything hobby electronics enthusiasts need for this Fairphone extension, the key module, all other individual parts, and even a template for simply soldering the new components together. (Cf. Bouschery 2018)

Do we encounter technologies of the self in these hacker practices that are, in Foucault's sense, both critical and virtuous? There is a lot to be said against it, that

should not be omitted: The described Fairphone practices are based on the myth of a comprehensive power to act. The self-proclaimed 'hackers' present themselves as an intentionally acting human and usually male user subject who retains control over the technical object and, just like himself, can free it from the tentacles of the smartphone industry. Here in particular, the connection between hacking and Fairphone's ethically modular corporate strategy is particularly close, and they share the same problems: In their plea for sustainability, 'repair cultures', i.e. communities of repairing or handicrafts that come together in repair cafés, for example, are also shaped by the idea of self-empowerment, the ability to act and the promise of community building. Repairing produces long-lasting, reused, or recycled things from short-lived industrial products. It is to be understood as a transformative practice of material objects. The creativity of repairing can be designed – similar to hacking – as an appropriation practice of ethically correct action in order to save the planet. (Cf. Krebs/Schabacher/Weber 2018; Schabacher 2017)

Hacking and repairing in this sense are based on the idea of a positively 'abused', transformed, or extended technical function tied to a human intentionality of purposes. An idea that, to take up once again Claus Pias's (2002: 261) theses on the hacker, does not make sense for digital computers – and thus neither for the smartphone. With the instructions being so conveniently presented on Fairphone's community website in the form of clickable requests for actions, the question arises whether this is a form of activism at all.[4] Comparably, in the packed and delivered Fairphone hack packages, soldering template included, activism appears rather as a customer service. Steven Levy formulated the slogan "Mistrust Authority/Promote Decentralization" in his *Hacker Ethics* already in 1984. Based on this ethic, the questions regarding Fairphone hackers are: Who is the untrustworthy authority, which center do hacker practices want to attack, and from which periphery? Hacker practices resemble more the forms of political resistance that take the smartphone as a handy (and here: transformable) tool of a subject that conceives of itself as powerful and potent. Hacking myths of outsmarting the device do not consider that the subject is interwoven in power relations and that every change in this relatedness concerns its very position as a user-subject.

4 Cf. "Welcome to the Fairphone Community, https://www.fairphone.com/de/community/?ref=header, last access 7.16.2020.

The Paradoxical Claim, not to be Governed Thusly

To analyze this in a final step I want to come back to one of the introduced Fairphone slogans: "This is not a phone. It's an opportunity to change the industry." Obviously, it is advertising that is supposed to work within the industry. The company Fairphone does not take an external standpoint, but pursues change from within, which cannot avoid being shaped by at least some economic interest and can by no means completely clear itself of the grievances it seeks to change. These are not the clean hands of heroic resistance, but resistant practices with dirty hands that result from an unmanageable pluralization of possibilities. However, I am more interested in the first part of the slogan: "This is not a Phone". In the Fairphone Community Forum, one user can serve as an example for numerous users who express their despair with the problems of the device: Her Fairphone 2 has a bad battery and even after trying a new one the device does not get through the day with one battery charge. The microphone is already defective again after being replaced three times. The opening of the camera or of other apps takes a long time, apps crash and send error messages once opened. "I want to love you Fairphone but I can't!", she closes her post. A 'Fairphone Angel' writes back to her and explains in detail how the company is working on improving these shortcomings. However, he ends with the following words: "The Fairphone stands for other values: for movement and for change. It's about the idea, not the smartphone." (Fairphone Community Forum 2018)

The resistive Cat's Cradle that the Fairphone involves its users in, by working on the smartphone industry, opens – again with Haraway – "partial and flawed translations across differences" (2016: 10). It initiates new forms of relationships, a constellation of participation that imposes itself to the participants and produces all participating entities anew. In this constellation, the smartphone does not appear as a reliably functioning device that follows human intentions. Rather, it proves to be an independent and dysfunctional mediator. The complexity of the heterogeneous relations of a fair smartphone is difficult to acknowledge and to withstand: "Es ist aus"[5] – that is the title of an article in the weekly newspaper *Die Zeit*, in which a frustrated user describes her failing relationship with a Fairphone. (Djahangard 2017) The Fairphone opens up a resistant medial participation in which the exclusive relationship between human and device, the intimate bond that the smartphone makes possible, is constantly at stake and the user at risk of losing herself in an unmanageable multitude of cross-species relationships. Following the threads from each part of the phone to its production conditions and the well-being of the involved actors complexifies the attachment of user and devices and accordingly the becoming of a user-subject. But it is precisely in this opening, I would like to

5 The title plays with a double meaning in German: "It is over"/"It is off".

conclude, where the resistant potential of Fairphone practices lies – where a Foucauldian form of critique can emerge. It is an uncomfortable and straining way to throw sand into the gear of the smartphone industry, that goes hand in hand with changes in the subjectivation of smartphone-users. It is a plea 'not to be governed thusly' in Foucault's sense. Not a big heroic upheaval like the smart mob or hacker utopians have in mind. But a resistance in small steps that involves the subject by paradoxically challenging its very position; a resistance that disturbs, shifts, and irritates.

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