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Harald Welzer (Vorwort)

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oekom verlag, München

ISBN: 978-3-86581-722-8

316 Seiten, 34,95 Euro

ISBN: 978-3-86581-802-7

272 Seiten, 34,95 Euro

ISBN: 978-3-86581-820-1

344 Seiten, 39,95 Euro

Erhältlich im Buchhandel oder bei www.oekom.de, oekom@verlegerdienst.de
Beyond Planned Obsolescence
Product Lifespans and the Challenges to a Circular Economy

Shrinking product lifespans, whose side-effects include increased natural resource use and greenhouse gas emissions, are negatively impacting the environment. The circular economy and bans on built-in obsolescence are widely embraced as solutions to today’s “throwaway society”. The serious limitations of both strategies, however, can be illustrated by analysing a marketing campaign of the Austrian mobile phone provider T-Mobile. A successful policy to encourage longer product lifespans requires measures beyond bans on built-in obsolescence together with a circular economy model accounting for both efficiency and sufficiency.

Harald Wieser

Recent empirical evidence confirms the long-held suspicion that product lifespans are falling (Bakker et al. 2014, Huisman et al. 2012, Prakash et al. 2016). This development is fastest among consumer electronics and accessories, for instance, LCD monitors and TVs have witnessed a fall in lifespans by 17 percent, and other information technologies like PCs, laptops, and mobile phones by ten percent between 2000 and 2010 (Huisman et al. 2012). In comparison, lifespans of large household appliances have fallen by seven percent between 2000 and 2010 in the Netherlands (Huisman et al. 2012) and by 7.8 percent between 2004 and 2012/13 in Germany (Prakash et al. 2016).

In the public debate, this development is commonly attributed to a phenomenon known as planned obsolescence, which may be defined as “the outcome of a deliberate decision by suppliers that a product should no longer be functional or desirable after a predetermined period” (Cooper 2010, p.4). This definition comprises several strategies of suppliers to accelerate the obsolescence of their products, including advertising, product design, incompatibility, and poor after-sales services among others. The argument figured prominently in the early critique of consumer culture (Galbraith 1958, Marcuse 1964) and was intensively debated in response to Vance Packard’s best-selling book The Waste Makers (1961). However, interest in this phenomenon faded until it was taken up again in the 1990s by the New Economics Foundation in the UK and the designer-led initiative Eternally Yours in the Netherlands (see Cooper 2010). This renewed interest within academia and public debate is particularly true for the German-speaking area, where three popular science books on planned obsolescence were published within the past three years: Kaufen für die Müllhalde (Reuß and Dannoritzer 2013), Geplanter Verschleiß (Kreiß 2014), and Murks? Nein Danke! (Schridde 2014). Also Stefan Schridde’s campaign1 and the media response to the latest reports on planned obsolescence commissioned by BÜNDNIS 90/DIE GRÜNEN (Alliance 90/The Greens, Schridde et al. 2014), the German Federal Environment Agency (Prakash et al. 2016), the Swiss Federal Environment Agency (Dettli et al. 2014), and the Austrian Chamber of Labour (Wieser and Tröger 2015), give evidence of the growing concern about shrinking product lifespans.

Product Lifespans in the Policy Arena

Particularly in the realm of consumer and environmental policy the term “planned obsolescence” is mainly used in a more narrow sense, with a pre-dominant focus on product design and the material qualities of consumer goods, also known as “built-in obsolescence”. According to this interpretation, there is a difference between the “normal” increases in replacement rates and the malicious practices of a handful of manufacturers. Consequently, manufacturers are only accused of planned obsolescence when deviating from common practice and deliberately designing products with built-in defects. From this perspective, the main problem is how to condemn these “rare but most flagrant cases” (EESC 2013, p.2) of planned obsolescence. This narrow position is reflected in recent attempts and calls for slower replacement rates: In 2015, France was the first country to outlaw built-in obsolescence and...
make it punishable by two years of prison or 300,000 Euro fine. At the European level, both the European Economic and Social Council and The European Consumer Association have pushed this issue up on their agendas and hosted a series of workshops and conferences since 2013, both actively supporting legally binding measures to ban built-in obsolescence. The European Commission, moreover, integrated built-in obsolescence into its circular economy package and announced “an independent testing programme on issues related to possible planned obsolescence practices”.²

In fact, the circular economy concept is nowadays widely embraced as a solution to a “throwaway society” based on short product lifespans (Montalvo et al. 2016).

There is a substantial risk that practices which accelerate obsolescence, such as marketing campaigns, will not be prevented. Indeed, these practices are even integrated and justified within a circular economy framework.

Against this background, this paper challenges the effectiveness of bans on built-in obsolescence as responses to increasing replacement rates of consumer goods and directs attention to possible misuses of the circular economy idea. My first argument is that the current debate on planned obsolescence with its emphasis on the physical lifetimes of durable goods is too narrow. By failing to take into account the socio-economic context, regulatory measures related to the physical durability of products (like bans on built-in obsolescence) are deemed ineffective.

Second, there is a risk that practices which accelerate obsolescence are not prevented, but even integrated and justified within a circular economy framework.

To illustrate these arguments I refer to a marketing campaign of the mobile phone service provider T-Mobile in Austria and the public reaction to this campaign. The case exemplifies the multiplicity of factors which may influence the timing of product replacements and shows how manufacturers and retailers can employ the idea of circular economy to counter criticisms of high product replacement rates.

JUHU! – The Case of T-Mobile in Austria

In the mobile phone industry, manufacturers are not the only actors that receive harsh criticism for purposefully accelerating the obsolescence of consumer goods.¹ Particularly the service providers’ heavily subsidised mobile phone contract models with a standard periodicity of two years are believed to stimulate premature replacements. However, in many advanced economies this contract model is about to be replaced by so-called Equipment Instalment Plans which grant consumers more flexibility with regard to their preferred replacement rates. One motivation for this transition was – contrary to the critics’ concerns – that previous two-year-contracts did not allow consumers to upgrade to a new phone even more frequently. In September 2014, mobile phone provider T-Mobile announced this new contract model also in Austria, promising their customers to opt for a new, unlocked phone up to every year. With this contract model, T-Mobile reportedly reacts to a saturated market with stagnating phone sales and seeks ways to generate revenues by focusing on existing instead of attracting new customers. T-Mobile supported the shift to the new model with a nation-wide marketing campaign called JUHU! (Hooray!), which stands for “jährlisch unkompliziert Handys upgraden” (“easily upgrading phones every year”; figure 1, p. 158). With this slogan and the add-on that “with JUHU! you can upgrade your phone already in 12 instead of 24 months only”, the campaign directly addresses the replacement rate and motivates consumers to replace more frequently. According to T-Mobile Austria, the new contract model has already successfully increased replacement rates.⁴

Moreover, as interviews with mobile phone users have shown, the advertisements have influenced the consumers’ perceptions of normality. Asked about the replacement cycle considered “normal”, seven out of 25 consumers interviewed in early 2015 mentioned the JUHU! campaign and concluded from this that the average consumer replaces her phone about every year (Wieser and Tröger 2015, p. 52). This is considerably lower than the statistical average of 2.7 years.

Yet T-Mobile went even a step further, launching a series of provocative and – depending on one’s sense of humour – funny TV spots of people shouting out “Juhuh!” as a reaction to a broken or obsolete phone, as, for instance, a teenager when finding out in the playground that her rival owns the same phone. Soon the whole campaign, especially the TV spots, came under fire by environment-minded consumers and concerned parents who wrote critical commentaries on the company’s Facebook website, YouTube, and online forums, some even filing complaints to the Austrian consumer protection authority.

2. www.marks-nein-danke.de
advertising council for promoting a careless “throwaway society”, particularly among children. T-Mobile defended its campaign and responded to every critical commentary on Facebook. The arguments brought forward by T-Mobile demonstrate two problems: the simplistic distinction between consumer and producer responsibility, and that longer product lifespans cannot be achieved with a circular economy model based on improvements in material efficiency.

Consumers: Sovereign Citizens or Prisoners of Junk?

Probably the most common argument brought forward by suppliers is that they are merely reacting to consumer demand. An insightful study of a computer manufacturer, for instance, found that its employees use a distorted image of the consumer as demanding constant innovation to justify rapid introductions of new products (Spinney et al. 2012). Also T-Mobile referred to consumer desire for more frequent upgrades to justify the new contract model. “We assume that we are dealing with sovereign citizens who can decide on their own whether they want to use and test the latest achievements of communication technology” (Facebook commentary on November 26, 2014). Also the company’s spokesman emphasised that the TV spots should be taken with humour. After all, it is the consumers’ responsibility to decide when to buy a new phone.3

On the other side, critics of planned obsolescence argue that increases in replacement rates are primarily driven by the production side, presenting the consumer as “the mere plaything of advertising or the prisoners of junk” (Sennett 2006, p.140). This simplistic dichotomy between consumers as sovereign citizens or victims of the industry characterises much of the current discourse on product lifespans. It is thus common to distinguish between the physical lifetime (Lebensdauer) and the use-time (Nutzungsduer) (Dettli et al. 2014), forced and unforced replacements (Bayus 1988), or absolute and relative obsolescence (Cooper 2004), whereby the responsibility for the former is typically considered to fall into the realm of the producer and for the latter to the realm of the consumer. However, while these concepts can be analytically useful, such a clear-cut distinction between consumer and producer responsibility can rarely be observed in practice. In fact, few durable goods fall out of use and are rendered completely useless from one day to another. Typically, products lose their symbolic or use value gradually over time as they increasingly become outdated or worn out. For instance, mobile phones

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\text{FIGURE 1: In 2014, mobile phone provider T-Mobile supported the shift to a new contract model with a nationwide marketing campaign called JUHU!}.
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The campaign directly addresses the replacement rate and motivates consumers to replace their mobile phones more frequently.
may become slower at processing data over time without losing their basic functionality. Then, the point in time at which the mobile phone is considered obsolete depends on both the manufacturer’s software updating policies and the consumer’s individual requirements and expectations. The end of a product’s lifespan thus cannot always be objectively defined, but may vary from user to user. Unless repair is impossible, this logic even applies to products that suddenly break down, for a decision on whether to repair or replace a device depends on the consumer’s willingness and capabilities as well as supply-related factors such as the availability of spare parts and costs of repair. Finally, consumers and producers interact already at the stage of product design. This is because designers cannot simply maximise product longevity, but instead need to take into account how long a product is likely to be used and which other criteria consumers expect the product to fulfil (Burns 2010, Prakash et al. 2016). The behaviour and demand of consumers thus feeds back into the decisions made in product development. These examples show that the timing of product replacements inevitably involves both consumers and producers, even in cases traditionally attributed to consumers (fashion) or producers (product design) only. Therefore, the common attribution of responsibility on the basis of whether consumer decision or product failure is considered the reason for product replacement cannot be maintained. This holds also true for extreme cases such as built-in obsolescence or a consumer’s desire for the new.

**Unintended Consequences of a Circular Economy**

Another argument brought forward by T-Mobile concerns the environmental implications of their new contract model. Several critics blamed the company for promoting a system based on the exploitation of natural resources in developing countries, emphasising related environmental hazards and poor working conditions in extraction, production, and disposal processes. T-Mobile’s standard response to this criticism is that the company is highly concerned about sustainability issues and has introduced a take-back system for used mobile phones to this end. Moreover, an environmentally certified waste disposal company would resell functioning devices on the global market and recycle broken phones. The business model promoted by T-Mobile corresponds to what could be called a “weak” circular economy model: reductions in waste are primarily achieved through improvements in material efficiency, and preference is given to political measures that support processes lower in the waste hierarchy such as recycling and refurbishing. However, such a “weak” circular economy model is not only focusing on the least effective measures, but could even jeopardise the aim of waste reduction by creating unintended consequences. As the reaction of T-Mobile illustrates, the circular economy framework can be used to justify and promote a business model based on trade-ins and recycling that even increases the attractiveness of faster product replacement rates — for both consumers and suppliers. This is problematic because higher replacement rates are not only associated with an intensified resource use, but also with higher emissions of toxics and greenhouse gases as well as an increased pressure on consumers who cannot afford or do not want to replace their possessions at an increasing rate (Downes et al. 2011). Under these conditions, the circular economy framework may thus turn out to be a red herring. To address these problems, the circular economy needs to focus on explicit measures towards the extension of product lifespans, thus providing for both efficiency and sufficiency (Bocken and Short 2016, Cooper 2005).

**Conclusions**

The timing of product replacements is not merely determined by designers and marketers as the narrative of planned obsolescence suggests, but constantly reproduced and negotiated in the interaction between all market actors. To gain a better understanding of the underlying causes and drivers of increasing replacement rates, future research thus needs to ask, as Bakker and colleagues point out, “what constitutes a ‘normal’ lifespan for products such as fridges and laptops and why and how people accept and accommodate ever-shorter product lifespans into their everyday lives” (Bakker et al. 2014, p. 14). Notably, such a perspective implies also a shift in politics from the prevalent focus on built-in obsolescence to other sales strategies, as there are clearly commercial interests in promoting a particular understanding of normality. Focusing only on the “most flagrant cases” of built-in obsolescence clearly means to avoid the elephant in the room. Furthermore, product durability and replacement rates need to figure more prominently in current efforts towards a circular economy if significant backfire effects are to be avoided.

1 I thank Nina Tröger, David Evans, Andrew McMeeKen for their helpful comments.

**References**


6 The link to the circular economy is evident in the case of the British service provider O2 (Coats and Benton 2016). O2 pursues a similar strategy, combining a service plan (O2 Refresh) that encourages early replacements (“Upgrade Early, Save Money & Get the Latest Phones”) with a recycling and reuse scheme (O2 Recycle).


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