# Why we love to hate to love obsolescence -
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By Joe Cantrell

Remember the phone you used five years ago? For many, the image conjures up thoughts of technology that has been rightfully replaced by something that is better, more functional and more fashionable. But at the time you used your previous device, it probably worked just fine for your purposes. It might still have been functioning just fine when you changed phones. So what is exactly driving this change? To answer this question, we need to look at a process that has been over one hundred years it he making: obsolescence.

The modern idea of obsolescence became prominent at the end of the 19th century as the industrial revolution and mass production became the norm for most of the Western world. Previous to this time, the idea of conservation and thriftiness was the norm - to dispose of something before it has completely worn out was a sign of wastefulness. This began to change with the availability of convenient, disposable goods. Among the first of these were men's collars and cuffs.. For many men in large urban centers, reliable laundry services were unavailable, so they instead purchased disposable paper cuffs, collars and shirt fronts that could keep up their social appearances without the need to buy multiple shirts. By the end of the 19th century, over 150 million of these collars were sold. This paved the way for the radical change it the way we use our goods, as items from watches to handkerchiefs became more expensive to repair than to discard.[1]
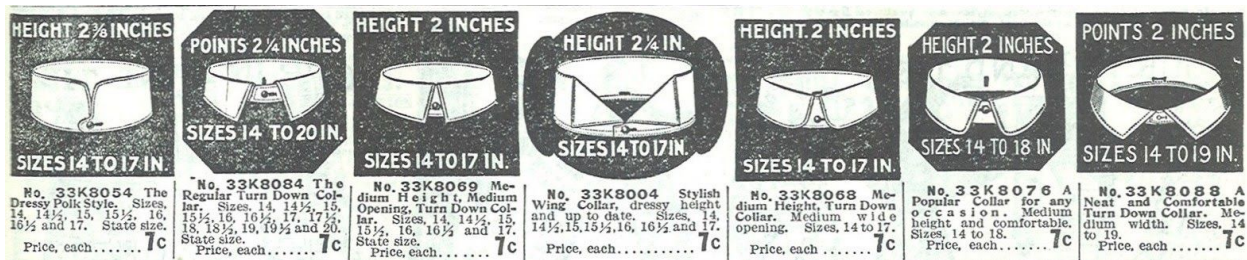
Men's paper collars were a predecessor to mass-produced disposable goods.

By the 20th century, this expectation of a constant stream of better commodities to replace the old led to the systemic embrace of obsolescence as part of the economy and of modern life. As time progress, obsolescence expanded as an idea and eventually branched off into three major areas: technical or functional obsolescence, planned obsolescence, and stylistic or psychological obsolescence.

Technical obsolescence occurs when a technology is no longer adequate to do the job it was designed for, a new technology appears that does the job better, or the job for which it was designed is no longer needed. For example, hand cranks for cars became functionally obsolete when the electric starter was invented. This would seem to be a natural by-product of continuing technological development resulting from the need to increase efficiency, but soon the link to

technological improvement and commerce gained attention. Economists, like Joseph Schumpeter, observed that industry must constantly adapt to new and changing circumstances by means of a constant influx of new consumer goods to eliminate and replace old ones.[2] Schumpeter called it 'creative destruction,' and promotional campaigns against the thriftiness of the previous century and towards a more disposable society became common.

Calculators were among the first IC-based e-waste items. By the late 1970s, reductions in size and performance changed the product from a state of the art technolog to a disposable good.

Planned obsolescence has more complex origins. The push towards more disposability of the early 20th century drastically changed after the 1929 stock market crash. During the great depression, cash-strapped consumers were less likely to buy consumer goods until they were no longer functional. Responding to this, American real-estate broker Bernard London self-published a pamphlet called "[Ending the Depression Through Planned Obsolescence](#)."[3] In it, he called for manufacturers to deliberately design their products to wear out or break after a limited amount of time, maintaining the cycle of obsolescence and driving the economy. The process was adopted and continued after the depression as it allowed for many companies to increase their sales volumes while lowering their material costs.

Planned obsolescence was brought to negative public light with the publishing of Vance Packard's book *The Waste Makers* in 1960. Packard re-introduced the term into the public consciousness, but with a critical focus.[4] His portrayal of the practice portrayed industrialists of the time as greedy and working against public interest as well as the increasing wastefulness of American consumer culture. Despite this exposure, industry adapted in kind, rebranding it 'dynamic' or 'progressive' obsolescence, with the idea of replacing the image of wastefulness with one of patriotic consumerist cooperation.[5] Regardless of terminology, planned obsolescence became a permanent fixture of the economy and continues to the present. In recent news, Apple has been accused of planned obsolescence with critics claiming that the

elimination of the headphone jack in the iPhone7 was driven not by technological innovation, but the desire to sell more products by steering consumers toward other proprietary accessories.[6]

Psychological obsolescence on the other hand, encourages the disposal of objects even when they are still perfectly functional. This is done by associating the newer product with fashionability and the older one with being 'out of touch' or 'behind the times.' This type of obsolescence can be easily seen in the fashion industry where an expectation of constantly changing style is distinctly visible. Psychological obsolescence is also prominent in technological market, especially mobile technology which often acts as a marker of fashionability and social status, with tech companies increasingly building it into their business models. Functionality aside, if you would feel embarrassed by using a cheap 'burner' phone instead of a smartphone, you can blame psychological obsolescence.

All this obsolescence might seem like a fair price to pay for the affordances of the contemporary digital worlds, and there is a case to be made for this. After, all it would be unlikely that the consumer products we enjoy would even exist if the obsolescence-driven markets had not created a demand for them somehow. But in light of global environmental concerns as well as issues of access and power in regards to technology, the question of obsolescence and waste is becoming an increasingly large problem.

Despite increased public awareness of the issues of waste, the amount of e-waste produced each year is immense. As of February 2015, only 27% of cell phones were recycled.[7] If the estimate for the iPhone 7 pre-orders are correct, they have already sold 16 million phones, with the majority of the buyers in possession of previous model in working order that is a lot of waste to chalk up to keep up appearances.

So what are we to do in the face of this problem? From the production side, modularity like Google's recently shelved project Ara[8], might be one solution. Another might be for tech companies to stop trying to play to expectations of 'world changing' products intended to be all things to all people and focus on more specific needs for more diverse markets. In addition, designing technologies with an eye towards their possible reuses after their moment in the sun has passed may help mitigate the needless waste associated with psychological obsolescence. On the consumer side, perhaps it's time to adjust our expectations of technology and to consider the cycle of obsolescence before we rush out and purchase shiny new devices.

Sources

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