The Lure of a Product's Origin:
How Upcycling attracts Consumers

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EXTENDED ABSTRACT

Two billion tons of waste go to landfills every year, threatening the environment, economy and society (Brosius, Fernandez, and Cherrier 2013; Trudel and Argo 2013; White, MacDonnell, and Dahl 2011). Upcycling, the process of transforming old into new products, is a promising way to help counter-act this alarming trend (Braungart 2013; Emgin 2012). Despite its growing popularity, the market for upcycled products is still small and research is scarce (Sung 2015; Wilson 2016).

Across four experiments, we show how consumer demand for upcycled products may be fueled through origin appeals (telling consumers what the product used to be), which we compare to outcome appeals (telling consumers what the product is now). We provide a consumer-status-explanation (McFerran and Argo 2014) for why this is the case. Specifically, we show how upcycled products make consumers feel unique, special, and recognized because of their historical value. We consider three competing explanations: authenticity, nostalgia, and sustainability. We also show that origin appeals are effective primarily, if they highlight what consumers cannot discern themselves, i.e., if the origin is only subtly (e.g., vases made out of insulators) vs. obviously (e.g., vases made out of light bulbs) visible. We show that these propositions are robust across products and original materials.

Study 1 establishes the effectiveness of origin appeals in the field. Two Facebook campaigns for an upcycling store were created (to increase page likes and online promotion clicks), targeting 1.34 million potential customers between 18 and 65. The ads featured an upcycled cake stand made from pot lids, a vase made from a light bulb and a pen holder made from forks. We manipulated appeal type, as in all subsequent studies, by communicating what the products used to be ("I used to be a…pot lid, light bulb, fork"; origin) vs. what they are now ("Now I am…a cake stand, a vase, a pen holder"; outcome). *Unique* and *total like rate* (likes relative to unique and total reach) and *unique* and *total click rate* (clicks relative to unique and total reach) were our DVs. Two-sample proportions z-tests revealed that origin appeals yielded higher unique ($Z=6.72$, $p<.001$) and total like ($Z=4.65$, $p<.001$) as well as click rates ($Z=1.91$, $p=.06$; $Z=4.97$, $p<.001$).

Study 2 investigates individual products, tests for moderation, establishes the process and addresses authenticity as a competing explanation (Beverland and Farrelly 2010; DeLong, Heinemann, and Reiley 2005). Ninety students (50.5% female, M_{age}=22 years) participated in a 2(appeal type: origin vs. outcome; between-subjects) x 2(origin visibility: subtle cake stand vs. visible light bulb vase; within-subjects) factorial mixed experiment. They were instructed to evaluate ads for a vase and a cake stand. Items for status (McFerran and Argo 2014), authenticity (Kadirov 2015; Newman and Dhar 2014), and demand (operationalized as purchase intention; Karmarkar and Bollinger 2015) were adapted from the literature.

A repeated-measures ANOVA revealed a significant interaction between appeal type and origin visibility on purchase intention ($F(1,88)=7.21$, $p<.05$, $\eta_p^2=.08$). Origin appeals increased purchase intentions for the cake stand ($t(88)=2.47$, $p<.05$), but not for the vase ($t(88)=-1.06$, $p=.29$). Likewise, we found the expected interaction on status ($F(1,88)=12.21$, $p<.001$, $\eta_p^2=.12$). Moderated mediation analysis (Hayes 2013) established an indirect effect of origin appeals on purchase intention for the cake stand (CI_{95}:[.172, 1.194]) but not for the vase (CI_{95}:[-.814, .235]). Authenticity mediated neither; it did not differ across groups.

Study 3 focuses on a single product and rules out nostalgia, which is known to generate preferences for products with references to the past (Schindler and Holbrook 2003) as another explanation. Seventy-five female students (M_{age}=24 years) participated in a 2 (appeal type: origin vs. outcome) x 2 (origin visibility: subtle vs. visible) between-subjects experiment and evaluated an upcycled cake stand. One group saw a cake stand made from pot lids (subtle origin). Another group saw a stand made from old vinyl records (visible origin). Demand and status were assessed as previously, nostalgia based on Wildschut et al. (2006).

The expected two-way interaction on purchase intention was also significant (F(1,69)=7.69, p<.01, η_p^2 =.10). Further, origin appeals increased status for the subtle (M_{origin}=3.86, $M_{outcome}$=2.66, t(30) = 2.26, p<.05), but not for the visible stand (M_{origin}=3.97, $M_{outcome}$=4.30, t(39)=- .73, p=.47; two-way interaction: F(1,69)=4.86, p<.05, η_p^2 = .07). A moderated mediation analysis produced an indirect effect of origin appeals on purchase intention for the subtle (CI_{95}:[.037, 1.154]) but not for the visible stand (CI_{95}:[-.621, .116]). Nostalgia failed to mediate the effect for both; it did not differ across groups.

Study 4 generalizes our effects to different products and original materials, shows that status increases demand because origin disclosure imbues products with history and eliminates sustainability as another explanation (Sörqvist, Langeborg, and Marsh 2016). 482 female mTurkers (M_{age}=35 years) participated in a 2 (appeal type: origin vs. outcome) x 2 (product type: subtle vs. visible) x 3 (product category: bags, vases, bowls) between-subjects experiment.

We find the hypothesized interactions on purchase intention (F(1, 470)=14.52, p<.001, η_p^2 = .03), status (F(1, 470)=22.48, p<.001, η_p^2=.05) and history (F(1, 470)=17.20, p<.001, η_p^2=.04) for all categories. We also find an interaction between appeal type and origin visibility on sustainability (F(1, 470)=7.61, p<.01, η_p^2 =.02), making it a viable alternative account. Indirect effects of origin appeal via status on purchase intention turned significant for all products with subtle (CIs excluded 0), but not with visible origins (CIs included 0). Sustainability showed no consistent results. Sequential mediation analyses per product produced significant indirect effects from appeal type to purchase intention via history and status for all products with subtle origins (CIs excluded 0), corroborating our assumptions.

This research is the first to present a status-based explanation for why consumers demand upcycled products after viewing origin appeals. Specifically, it suggests that upcycled products may be used as alternative signals of status (Bellezza, Gino, and Keinan 2014) because they contain history. We show that particularly under conditions of low origin visibility, marketers need not waste resources on promoting upcycled products as environmentally-friendly. Instead, they should promote their status-affording potential by showing how they can help consumers stand out from the crowd.

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