

"Brand play" versus "Brand attack": the subversion of brand meaning in non-collaborative co-creation by professional artists and consumer activists

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Abstract

Purpose – This paper aims to investigate the ways in which "non-collaborative co-creation" can affect brand equity as perceived by independent observers. It reports a study of the different effects on that perception attributable to non-collaborative co-creation that takes the form of either "brand play" or "brand attack" and is executed either by established artists or mainstream consumers.

Design/methodology/approach – A 2×2 between-subjects experiment (brand play versus brand attack; consumer versus artist) measured observers' perception of brand equity before and after exposure to purpose-designed co-created treatments.

Findings – Non-collaborative co-creation has a negative effect on observers' perceptions of brand equity and brand attack, causing a stronger dilution of brand equity than brand play. Artists either mitigate the dilution or have a positive effect on those perceptions.

Research limitations/implications – Future research could usefully investigate the relative susceptibility of brands to non-collaborative co-creation, the effects on brands of higher complexity than those in our experiment, exposed in higher-involvement media, and the effects of more diverse forms of co-creation.

Practical implications – Brand managers must recognise that co-creation carries considerable risks for brand equity. They should closely monitor and track the first signs of non-collaborative co-creation in progress. It could be beneficial to recruit artists as co-creators of controlled brand play.

Originality/value – This study offers a more complete insight into the effect of non-collaborative co-creation on observers' perceptions of brand equity than so far offered by the existing literature. It connects the fields of brand management and the arts by investigating the role and impact of artists as collaborative or non-collaborative co-creators of brand equity.

Keywords Brand equity, Artist co-creators, Brand attack, Brand play, Non-collaborative co-creation

Paper type Research paper

Introduction

One view of branding is as a dynamic social process constructed through multiple relations between companies and stakeholders, for instance, [Merz et al. \(2009\)](#), [Veloutsou \(2009\)](#), [Vallaster and Von Wallpach \(2013\)](#), [Kaufmann et al. \(2016\)](#) and [Von Wallpach et al. \(2017\)](#). The outcome of active dialogue and interaction between the integrated parties is "co-creation" of the brand's value and meaning ([Iglesias et al., 2013](#); [Black and Veloutsou, 2017](#)). Most published studies in the field of brand co-creation tend to take an optimistic

perspective of consumers engaging with each other and with the brand, a process which has become a key objective in the marketing strategies of many companies ([Dessart et al., 2015](#)). However, the involvement of consumers in the creative and innovative co-creation processes around branding entails the risk of negative forms of engagement ([Hollebeek and Chen, 2014](#)). Brand co-creation can mean that companies lose control over the brand's meaning ([Cova and Paraque, 2016](#); [Saleem and Iglesias, 2016](#)), which may be pushed in unwanted directions ([Ind, 2014](#)). Co-creators could misuse their increased empowerment by behaving non-collaboratively

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instead of as valuable contributors and thereby representing an uncontrollable source of information (Black and Veloutsou, 2017). Both the existing literature and real-life cases suggest that non-collaborative co-creators may either playfully parody initial brand meanings or express negative emotions they feel towards the brand and its meanings (Fournier and Avery, 2011; Zarantonello et al., 2016; Hegner et al., 2017).

In real-world cases, the entries in an online label design competition in 2011 backfired for the German dishwasher detergent brand Pril. Among non-serious and facetious designs and slogans, one included the headline "Tastes of chicken", and another featured a distorted cartoon face (howtodotcom, 2011). A similar competition for the Nutella brand in France attracted submissions containing a number of words to which the brand owner seriously objected, such as "palm oil" or "orangutan". Provoked by what was seen as censorship, contestants turned to negative and harmful word-of-mouth (Theeboom, 2015). Both brands were thus facing the consequences of non-collaborative co-creative behaviour, which certainly did not work to their own advantage. The literature normally focusses on consumers as the co-creators of brand meaning subversions, but also acknowledges that professional artists are often the originators of brand-related parodies and anti-brand content (Klein, 1999; Sandlin and Milam, 2008; Borghini et al., 2010). Specific cases include a German artist known for his gentle mocking of brand names and logos, Petrus Wandrey, who transformed Nivea Crème into "Naïve Crime" and Rolex into "Relax" (Petrus-wandrey.com, 2015), and the American artist Ron English, who explicitly attacks brands rather than playfully distorting logos or designs. Blazenhoff (2012) reports his re-naming a Kellogg's cereal as "Sugar Frosted Fat from Killkids" and picturing the brand's mascot Tony the Tiger as an overweight "Fat Tony".

Although such brand parodies and negativity towards brands are a current and developing phenomenon (Fournier and Alvarez, 2013; Rauschnabel et al., 2016; Veloutsou and Guzman, 2017), research has so far paid very little attention to the brand-related effects of non-collaborative co-creation. Non-collaborative behaviour has been identified, however, as a significant feature of interactions between a brand owner and its stakeholders (Echeverri and Skalen, 2011; Gebauer et al., 2013; Greer, 2015) with the attendant danger that altered brand meanings can start to compete with those initially created by brand managers and thereby decrease the value of hitherto successful and competitive brands (Thompson et al., 2006; Giesler, 2012; Cova and D'Antone, 2016). In such a situation, co-creation is not a process of mutual brand value development, but becomes one of brand meaning destruction (Gyrd-Jones and Kornum, 2013). If so, non-collaborative co-creation is a serious threat to a brand and its carefully nurtured equity. There is therefore an urgent need to explore the ways in which the results of non-collaborative co-creation are perceived in the marketplace. Our paper accordingly presents what is to the best of our knowledge the first empirical attempt to investigate the effect of that one form of co-creation on brand equity as perceived by the observers of the co-created content. We define that perception as "observer-based brand equity" or *OBBE*. Our study also tests the extent to which the effect on *OBBE* is moderated by the particular form of non-

collaborative co-creation, on the grounds that such distinct forms might have a totally different effect on the brand and that their potential damage to its equity could therefore differ significantly, as well as the consequent need for the brand owner to react appropriately. In one such form, the brand may serve as a fodder for parody and pranks (Harold, 2004; Thompson et al., 2006; Fournier and Avery, 2011); we call this "brand play". In another form of non-collaborative co-creation, the brand is hijacked for a destructively negative re-imagining of its meanings (Cova and Pace, 2006; Romani et al., 2015; Zarantonello et al., 2016); we call that "brand attack".

A second moderator explored in the study is the type of co-creator, specifically general consumer or independent artist. Artists do regularly engage in non-collaborative co-creation (Klein, 1999; Borghini et al., 2010), and we may suppose that the effect they have on *OBBE* will differ from that exerted by mainstream consumers. Research studies having furthermore shown that art has a positive effect on brands (Hagtvedt and Patrick, 2008a; Fuchs et al., 2013; Lee et al., 2015), we explore the extent to which that also holds true in the case of non-collaborative co-creation.

Our findings are as follows:

- Non-collaborative co-creation can lead to a dilution of brand equity even for high-equity brands, demonstrated by a before-and-after negative change in *OBBE*.
- Its effect is moderated by the form of non-collaborative co-creation and type of co-creator.
- Artists can influence brand equity positively even if the artwork is the result of non-collaborative co-creation behaviour.

These findings can help academics and practitioners alike to better understand the dangers and risks inherent in brand co-creation. Specifically, they offer guidance on when to take action against destructive non-collaborative co-creation and how to engage artists in the branding process constructively.

Conceptual background and development of hypotheses

Co-creation of brand meaning

Consumer co-creation challenges traditional company-centric approaches to management. A company is no longer the sole creator of value but shares that task collaboratively with its stakeholders (Prahalad and Ramaswamy, 2004). The co-creation idea is strongly rooted in innovation and new product development (Ind and Coates, 2013). More precisely, the traditional innovation paradigm views consumers as passive entities who are largely dependent upon firms to help satisfy their needs. This perspective has been challenged by, for instance, Von Hippel (2009), while the growing empowerment of consumers to co-produce products and services with other consumers and with the brand owners has been recognised by Chang and Taylor (2016). Co-creation in NPD focusses on collaborative interactions between integrated parties. Enthusiastic consumers who are well disposed towards a brand become involved with it and support the brand owner in developing and evaluating innovations (Cui and Wu, 2016). The generally positive tenor of findings in innovation management research has strongly influenced the application of the co-creation perspective to other fields such as branding

and to the optimistic level of discussion of co-creation in the brand management context.

The notion of brand co-creation is founded upon the proposition that a brand can no longer be defined simply as a representation of a product or service but must rather be understood as the perceptions and interests that unite a disparate group of stakeholders in the pursuit of common cause (Hatch and Schultz, 2010). The literature of branding has simultaneously progressed from the perspective of brands as markers of identification and means of product differentiation to a dialogue discussing brands in terms of a complex social process allowing for the co-creation of value and meaning by multiple stakeholders (Ind *et al.*, 2013; Gyrd-Jones and Kornum, 2013; Kaufmann *et al.*, 2016; von Wallpach *et al.*, 2017). The notion of co-creation posits that instead of accepting the brand owner's view of what its brand is, consumers and other stakeholders act as joint creators and active conduits of brand meaning (Vallaster and von Wallpach, 2013), which incorporates both its identity and its reputation of the brand (Black and Veloutsou, 2017). Stakeholders thus have the power to divert a brand's internal positioning and its external identity and image in totally new directions.

Academic studies of co-creation, including those focussing specifically on brands, have so far tended to neglect the intuitively reasonable proposition that possible negative outcomes must exist. Their perspective is clearly optimistic, emphasis being placed on the product-related and brand-related benefits of co-creation and potential risks combined with customer integration stay overlooked. In fact, non-collaborative behaviour has been identified as a significant feature of interactions between brand owners and stakeholders, capable of inhibiting a positive co-creation strategy (Echeverri and Skalen, 2011; Gebauer *et al.*, 2013; Greer, 2015). Co-creation thus becomes a process of mutual destruction of brand meaning rather than one of mutual brand development (Gyrd-Jones and Kornum, 2013).

Co-destruction of brand meaning

The process of brand co-creation has been most thoroughly explained in academic studies of brand communities in which individuals establish relations with each other and with the brand to co-create the brand's meaning, for example, Muniz and O'Guinn (2001), Cova and Pace (2006), Veloutsou (2009) and Dessart *et al.* (2015). A separate research stream in the literature has shown that brand meanings can be co-destroyed in geographically independent "anti-brand communities" made up of individuals who are opposed to brands (Hollenbeck and Zinkhan, 2006, 2010; Cova and White, 2010; Dessart *et al.*, 2016; Popp *et al.*, 2016), the existence of which is said to be an example of the growing negativity towards brands (Veloutsou and Guzman, 2017). The literature has recently acknowledged that consumers can indeed dislike brands (Demirbag-Kaplan *et al.*, 2015) and sometimes even feel "hate" for them (Zarantonello *et al.*, 2016; Hegner *et al.*, 2017). It has in fact been argued that such negative relationships with brands are even more common than the positive alternative, and that co-creation as a tactic for brand building is strongly driven by risk (Fournier and Alvarez, 2013). Negative forms of engagement with a brand, as reported for example by Hollebeck and Chen (2014) call into question the optimistic

paradigm of peaceful collaborative creation, emphasising instead that co-creation can seriously endanger brand equity.

Another distinct mechanism for transforming initial brand meanings in unwanted directions is "culture jamming", an increasingly popular activity that can be understood as social protest against a consumption-oriented culture and the influence of commercial mass-media (Klein, 1999; Kozinets and Handelman, 2004; Sandlin and Milam, 2008). Its proponents distort and re-define the cultural symbols that are most often represented by successful and iconic brands (Romani *et al.*, 2015). Culture jamming takes many distinct forms, such as the subversion of advertisements and parodying of websites. Exponents may even shoplift an item, change its labelling or packaging and return it to the shelves (Sandlin and Milam, 2008). The most prevalent manifestation of culture jamming is so-called "adbusting", often carried out by independent artists, the aim of which is to create "adversarial" brand meaning by publishing and distributing "anti-advertising" (Rumbo, 2002). While anti-brand communities are clearly related to anti-branding and negativity towards brands, culture jamming also contains the notion of brand-related parodies and pranks that are playful rather than confrontational (Harold, 2004; Fournier and Avery, 2011). Their aim is to "improve" meanings to force a change, rather than to destroy them (Klein, 1999).

Anti-brand communities and culture jamming are clear cases-in-point of the general phenomenon of *non-collaborative co-creation* in action, in our context with respect to brand imagery, brand meaning and brand equity. Though such co-creation is not necessarily negative just because it is "non-collaborative", our study is concerned with the scenario in which a brand owner's stakeholders misuse their increased empowerment in the process and do not integrate their resources in the way the company expects. Drawing upon the notion of "devaluation of value" (Plé and Chumpitaz Cáceres, 2010), we can characterise non-collaborative brand co-creation as the collaborative co-destruction of brand value. The very fact that external actors may become involved in the branding process means that while a company can plan and manage a strategy for brand identity, it cannot be in full control of public perceptions of the brand's meanings (Saleem and Iglesias, 2016; Cova and Paraque, 2016). That fact brings with it challenges and risks, given that the commercial interests of the organisation can come into conflict with the intrinsic motivations of consumers and other stakeholders, who may want to steer the brand in directions unwanted by the brand owner (Ind, 2014). This process fosters brand-related parodies and what Thompson *et al.* (2006) and Giesler (2012) have described as "doppelganger images" capable of diluting brand meanings and endangering a brand's equity. As most of such co-creation takes place in online networks (Vallaster and von Wallpach, 2013), altered brand meanings diffuse rapidly and thereby increase the possible danger of non-collaborative behaviour.

To the best of our knowledge, there is no available empirical research into non-collaborative co-creation while the majority of studies in closely related fields, such as anti-brand communities and culture jamming, have majored on qualitative research (Romani *et al.*, 2015). Bearing in mind the potential risks of such co-creation for a brand (Fournier and Alvarez, 2013), our

study aims to close a gap in current knowledge with regards to the effect of non-collaborative co-creation on brand equity by studying the process experimentally. Given that brand equity is now considered to be a key asset for almost any firm in the mass market and has become a key concept for marketing academics (for example Christodoulides *et al.*, 2015; Chatzipanagiotou *et al.*, 2016), OBBE emerges as the most appropriate measure of the effect. Our study is particularly concerned with investigating how observers in the marketplace perceive the results of non-collaborative co-creation. In the process of co-creation, the overall brand equity is made up of the equity of a small fraction of *active* participants who agree to engage in the process and a large proportion of *passive* observers who heavily outnumber the former (Fuchs *et al.*, 2013; Kristal *et al.*, 2016).

Dilution of brand equity by non-collaborative brand co-creation

A key proposition underpinning our study is that non-collaborative co-creation has a negative effect on OBBE. We believe that this effect is caused by a dilution of brand equity, as demonstrated by a negative difference in before-and-after OBBE values, a measure previously applied by Pullig *et al.* (2006) and Bambauer-Sachse and Mangold (2011) to the same phenomenon. In our study, dilution is operationalised as a response to negative cues communicated by specific cases of non-collaborative co-creation: specifically, distorted brand logos and advertising images that trigger constructive processing of information in a way that may revise initial beliefs about the brand and bring about a weakening of important brand value perceptions (Fournier and Alvarez, 2013). An inconsistency could thus emerge between those initial beliefs and the distorted and deformed brand imagery (Keller, 2003). Specifically, altered meanings challenge initial meanings; there is a good chance that observers will revise their initial brand evaluation towards the non-collaborative co-creation, and a dilution of OBBE will potentially result.

Our first research hypothesis is thus that:

- H1. Non-collaborative behaviour of co-creators has a negative effect on OBBE.

This proposition may at first sight seem intuitively obvious, but we contend that there is an urgent need to examine it empirically, first because this type of co-creation has not yet been formally investigated and its effect on brand equity is therefore unclear, and second because one form that it commonly takes in practice is culture jamming, the playful parodying of brand meanings. Fournier and Avery (2011) have argued that such parodies can in fact be an indication of much-coveted cultural resonance for original brand meanings. It could thus be the fact that they would increase brand awareness, a benign or even positive outcome for the brand, and ultimately mitigate the expected negative effect on OBBE.

Different forms of non-collaborative brand co-creation

The literature suggests that there are two forms of non-collaborative brand co-creation, which can be detected in real-life scenarios: the phenomena we have called brand play and brand attack. It was essential to test both in our study because

their effect on OBBE is unclear and the need is to capture the overall effect of non-collaborative co-creation.

Brand play can be recognised when the brand is used as a fodder for parody. It has its roots in culture jamming and the playful creation of parodies. The concept of playfulness has been studied extensively in marketing-related research as a possible response to advertising (Alden *et al.*, 2000). It has been noted that it is strongly associated with the application of humour to advertising (Rössner *et al.*, 2017), and that a positive connotation is attached to it (Aaker *et al.*, 1988). Playful subversion of a brand might create a positive and risk-free context for observers (Fournier and Avery, 2011), but could, on the other hand, generate a disconnection between actual brand beliefs and perceived brand attributes, thereby leading to a revision of initial brand meanings. We compare this situation with an unsuccessful brand extension in which the extension attributes are inconsistent with beliefs regarding the family brand (Roedder-John *et al.*, 1998). Our assumption is that this inconsistency will lead to a dilution of OBBE. The second form of non-collaborative brand co-creation is, by contrast, a clearly derisive and aggressive way of subverting a brand, for example, by criticising the brand owner's corporate practices, such as the exploitation of child labour and sweatshops; we call that *brand attack*. Hegner *et al.* (2017) argue that this form is strongly related to negative emotions with regards to brands and to anti-branding. Tanner *et al.* (1991) and Alden *et al.* (2000) suggest that attacking a brand's meaning can actually engender fearfulness, especially if the brand is depicted in a threatening context. Brand attack and the reaction to it is seen as a brand-related adverse event by Dutta and Pullig (2011), who link it to a brand crisis. This can not only have devastating general consequences for the brand (Dawar and Pillutla, 2000) but also dilute its equity (Fournier and Alvarez, 2013). We therefore believe that both brand play and brand attack have a negative effect on OBBE and cause its dilution, the effect of the latter being expected to be stronger than that of the former.

Our second research hypothesis is thus that:

- H2. The form of non-collaborative brand co-creation moderates the effect on OBBE.

Artists as non-collaborative brand co-creators

The literature also concerns itself with artists, rather than mainstream consumers, as a significant category of non-collaborative co-creators (Klein, 1999; Borghini *et al.*, 2010). Various cases in point show how they may distort brand logos and graphic images by either brand play or brand attack, as exemplified, respectively, by the non-collaborative co-creations of Petrus Wandrey and Ron English described in the Introduction.

Increasingly, brand owners actively seek to join forces with the arts, while an increasing number of artists are cooperating with commercial organisations beyond the art world (Iezzi and Wheaton, 2007). There is general agreement that consumers perceive art differently from how they perceive other objects (Joy and Sherry, 2003). In recent years, some studies have begun to investigate the use of art as a marketing tool. The "art infusion hypothesis" (Hagtvedt and Patrick, 2008a) asserts that the integration of art has a positive effect on the image of a

product or a brand, whether the artwork is evaluated positively or negatively by consumers; it is the fact of integrating art and commerce that exerts the influence. It can also have a positive effect on a brand's perceived extendibility (Hagtvedt and Patrick, 2008b) and may furthermore enhance perceptions of its prestige, quality, value and uniqueness. This positive effect can occur whether consumers are familiar with the artist (Lee et al., 2015). It was found by Lacey et al. (2011) that imagery associated with "art" was preferred to that associate with similar images that were visual but not classified as art. They argue that whatever their content and form, such visual stimuli operate upon the area of the brain connected with rewarding experiences, evoking positive feelings and emotions. Research has also found that art can have a beneficial effect on corporate reputation and image, especially if the company sponsors cultural activities and institutions and announces the fact to the public (Quester and Thompson, 2001; McNicholas, 2004; Schwaiger et al., 2010), and that purchase intention and customer loyalty increase when companies are committed to sponsoring the arts (Carrillat et al., 2008; Mermiri, 2010).

In the literature, artist co-creators are described as being socially distanced from mere participants in co-creation campaigns. To counter the mitigating effect of co-creation on the image of luxury brands, Fuchs et al. (2013) proposed a strategy to "legitimise" those consumers who were part of the co-creation activity. They found that observers rated user-designed luxury brands more positively if the co-creators were socially distanced to some extent from average consumers by being described as "artists". So, in general, it seems likely that any individual who has been presented as a legitimate influencer can have a positive effect on observers' evaluation of the brand. Artists can exert that influence in particular because of their social distance from other consumer co-creators and mere observers. Thanks to their superior experience and expertise in design processes, artists can be declared as "experts", who will be credited with the ability to perform product-related tasks in a specific area more successful and skilful than novices (Jacoby et al., 1986; Alba and Hutchinson, 1987). Marketers may be able to convey messages more effectively by working with experts as spokespeople for a product or a brand because the persuasiveness of the message and trustworthiness of the source are increased and consumers feel more confident during the purchase and consumption process (Atkinson and Rosenthal, 2014).

Based on the positive effect of art on a brand and harnessing the idea that mere consumers could rate artists as experts, we assume that non-collaborative brand co-creation by consumer co-creators results in a stronger dilution of OBBE than co-creation by artist co-creators.

Stating that proposition as a formal research hypothesis:

H3. The type of co-creator moderates the effect on OBBE.

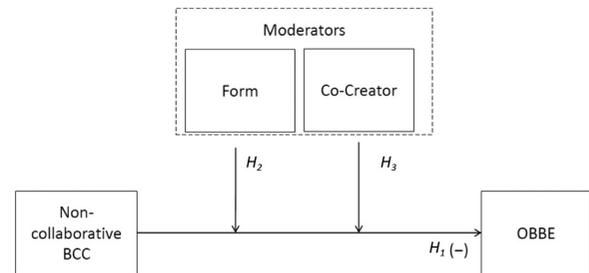
The conceptual framework in Figure 1 summarises the relationships postulated in the three research hypotheses.

Empirical study

Sampling

Brand co-creation mostly takes place online (Fournier and Avery, 2011; Kennedy, 2017), and the millennial generation

Figure 1 Conceptual framework



accounts for as much as 90 per cent of social media users (Duggan et al., 2014), the majority of those being students. Thus, it is students who mainly engage in brand co-creation and who are typically exposed to the results of co-creation activities. Also, people born between 1982 and 2000 now represent more than a quarter of the population in the USA (Kennedy, 2017), constituting crucial target groups globally for the brands chosen for the pilot study, pre-tests and main study. If any research findings are to be applicable to consumers of a specific product category or specific brands, then the research should sample those people (Calder and Tybout, 1999). Therefore, a student sample was a proper choice as such a sample is representative of a population of interest in the context of our study. From a statistical point of view, students enhance research validity on account of their apparent homogeneity (Peterson and Merunka, 2014). The resulting high level of internal validity plus the reduced extraneous variability in data allow for strong hypotheses tests to be conducted (Calder et al., 1983; Peterson, 2001). This was considered to be a particularly important consideration for the design of our study because the effect of non-collaborative brand co-creation on OBBE has never been tested before: the effect could prove to be small and a beta error could therefore discourage further research into the phenomenon in future. Our study was in fact concerned more with the testing of theory than with the generalisation of results to other population groups. To ensure that testing was both rigorous and powerful, the sample needed to be as homogenous as possible. The homogeneity within student samples is essentially higher than within other homogenous or non-homogenous samples (Calder et al., 1983; Calder and Tybout, 1999; Peterson, 2001; Reynolds et al., 2002).

Pilot study

A pilot study was conducted to inform the selection and design of the two implementations of non-collaborative brand co-creation to be tested: "brand play" and "brand attack". In total, 19 students of business administration and economics at a German university were exposed to a dossier of 29 representations of well-known brands, from varying product categories and different levels of complexity, all of which had been distorted in some way by individuals exposed to them in the marketplace. They were asked to say if the motivation of the consumer co-creators seemed to them to be to play with the brand or attack it. The first of those alternatives would correspond to such descriptions as "playful", "humorous", "silly", "ironic" or "youthful" and the second to "attacking",

"destroying", "aggressive", "threatening" or "irritating" (Aaker et al., 1988; Alden et al., 2000). After identifying those logos which looked unfamiliar and could not be associated with any brand, participants allocated each of the remainder to one of three groups by writing "P" (brand play), an "A" (brand attack) or a "?" (not sure) on the image itself. Of the 29 brands, 7 were classified as either P or A.

Pre-tests

While the approach of the pilot study was exploratory, the objective of first of two pre-tests was to develop scales for the measurement of one independent variable, the form taken by non-collaborative brand co-creation: play versus attack. We used Adobe Photoshop to design a "counterpart" for each of seven logos and graphic treatments which had survived the pilot study. The counterpart of one designated A for brand attack was manipulated to depict brand play, and vice versa. As the notion of play is closely associated with the concept of humour, the play alternatives were treated humorously. The brand attack classification being related to brand-adverse events, our distorted creative treatments were associated with child labour. Examples of the distorted alternatives for two of the seven brands are shown in Appendix .

The scales for the measurement of play and attack were based on the work of Aaker et al (1988) and Alden et al. (2000). Specifically, in the case of play, they were seven scale items (funny, playful, humorous, childish, silly, zany and youthful); for the attack variant, the scale comprised six items (fearful, attacking, destroying, threatening, aggressive and irritating). We allocated 38 undergraduate students of business administration, 21 of whom were female, between two sub-samples which would be exposed to either the play or attack manipulation. A recording schedule presented them with one or other of the two treatments, the corresponding seven or six scale items, and rating scales anchored at 1 = totally disagree and 5 = completely agree. Exploratory factor analysis found that, in the case of brand play measurement, two items loaded on a second factor: "childish" and "silly". Those were duly eliminated. Brand attack loaded on a single factor. The reliability of the scales was confirmed by Cronbach's α coefficients of 0.876 for brand play and 0.915 for brand attack. A *t*-test for each of the manipulations of the two modes (play versus attack) and their respective rating scales showed that those for Adidas, Nike, Levi's and Burger King were effective and significant (Table I). The manipulations for Starbucks, Puma and Hewlett-Packard were not successful, and these brands were removed from the next stage.

Table I Results of first pre-test

Manipulations	Brand play	Brand attack	Significance
Adidas play	3.41	2.39	$p = 0.00$
Adidas attack	1.62	3.21	$p = 0.00$
Levi's play	4.16	1.36	$p = 0.00$
Levi's attack	1.41	3.74	$p = 0.00$
Nike play	3.93	1.50	$p = 0.00$
Nike attack	1.64	3.00	$p = 0.00$
Burger King play	3.18	2.41	$p = 0.04$
Burger King attack	1.46	2.93	$p = 0.00$

The second pre-test adopted tried-and-tested scales for measurement of the effectiveness of a second independent variable, whether the co-creator was a consumer or an artist. Based on the mean values found in the first pre-test, we chose the Nike and Levi's brands to be the stimuli. We furthermore created purpose-written newspaper stories about the co-creation of the logos and graphic treatments presented to the participants. One reported that co-creators, either consumers or artists, had spontaneously distorted the Nike logo and visual in the two different ways shown in Appendix and disseminated the result online. The other explained that Levi's had instigated the co-creation process by running a competition and that those "integrated" consumer or artist co-creators had chosen to attack the brand by distorting those elements in one of the two ways shown in Appendix, rather than simply playing with them. The articles confirmed the "artist" status of the co-creator by reporting that he had exhibited in the previous year at the Museum of Modern Art in New York and was famous for distorting the graphic representation of iconic brands. Participants in this pre-test were 45 undergraduate students of business administration, 26 of whom were female. They read the article on the first brand before seeing the distorted visual image and then responding on a Likert scale anchored at 1 = totally disagree and 5 = completely agree to the statements "This graphic treatment of the brand is art" and "The co-creator is an artist", adopted from a study by Hagtvedt and Patrick (2008a). They then repeated the procedure for the second brand. The results showed that the manipulation of co-creator type had been effective. In the case of the brand play treatment for Nike (artist co-creator against consumer co-creator), the distorted logo and transformed strapline seen in Appendix were evaluated as art ($4.18 > 1.81$; $p = 0.00$) and the creator as an artist ($4.27 > 2.09$; $p = 0.00$). For the brand attack alternative (artist co-creator against consumer co-creator), in which the "swoosh" logo was unaltered but the strapline was clearly polemical, the treatment was again evaluated as art ($3.63 > 1.66$; $p = 0.01$) and the creator as an artist ($3.72 > 1.83$; $p = 0.00$). With regard to Levi's, the brand play treatment (artist co-creator against consumer co-creator), involving an anagram of the brand name and an image of Elvis Presley, as also shown in Appendix, the treatment was assessed as art ($3.83 > 1.54$; $p = 0.00$) and the creator as an artist ($4.25 > 1.72$; $p = 0.00$). In the brand attack variation in which the brand logo was intact but the visual unarguably hostile, the treatment was once more seen as art ($3.72 > 1.63$; $p = 0.00$) and the creator as an artist ($4.18 > 1.54$; $p = 0.00$).

Study

In the mixed design of our study, the within-subjects factor was elapsed time and the 2×2 between-subjects factors were formed (brand play versus brand attack) and typed (consumer as co-creator versus artist as co-creator). The F-tests were Greenhouse-Geisser adjusted. The 255 participants in the main study were students at a German university, three quarters of whom (76 per cent) were studying Business Administration and Economics; their average age was 23 and 60 per cent were female. Though it would be risky to generalise such a specific sample, a significant proportion of users of Levi's and Nike products are indeed of student age. With that proviso, the findings presented in the next sub-section are an

original empirical attempt to capture the effect of non-collaborative co-creation on brand equity.

The experimental procedure comprised before-and-after measurement of OBBE with a period of unrelated activity sandwiched between the two measurements. In the before phase, participants were given a dossier containing non-manipulated treatments of advertisements for Nike and Levi's and also for the German chocolate brand Milka, an extra stimulus placed in the middle of the dossier to distract them from the exact purpose of the study. OBBE was measured for all three brands to capture the baseline brand equity of each. Completion of the "before" measurement scales was followed by 45 min of "filler" activity unrelated to the experimental scenarios, the purpose of which was again to deflect attention from the exact purpose of the experiment.

For after-measurement of OBBE, participants were given a second dossier containing the pre-tested manipulated versions of the visual treatments and newspaper articles relating to Levi's and Nike, attributed to the intervention of an artist or a consumer, plus non-manipulated Milka stimuli and an entirely neutral newspaper article. They completed the same rating scales as before, measuring their perceptions of the brand equity of Nike, Levi's and Milka in the various experimental conditions described.

The particular focus of the main study was the dilution in OBBE, which would be demonstrated by a negative difference in before-and-after values for OBBE, as in studies by Pullig *et al.* (2006) and Bambauer-Sachse and Mangold (2011).

Table II shows the 11 different items chosen to measure the dependent variable OBBE, which have been used in a recent study by Kristal *et al.* (2016). Those are derived from scales for the measurement of OBBE in several earlier studies (Yoo and Donthu, 2001; Atilgan *et al.*, 2005; Bravo Gil *et al.*, 2007; Lehmann *et al.*, 2008). The reliability of the current scale was confirmed for both brands in the before and after measurement by the Cronbach's α coefficient (Levi's_{before} = 0.908; Levi's_{after} = 0.939; Nike_{before} = 0.858; Nike_{after} = 0.954).

The effectiveness of both manipulations was checked again for the main study by the same measures as in the pre-tests. T-tests showed the effectiveness and significance of the form of non-collaborative brand co-creation: Nike_{bp} (4.45 play >

1.53 attack; $p = 0.00$); Nike_{ba} (4.15 attack > 1.40 play; $p = 0.00$); Levi's_{bp} (4.35 play > 1.38 attack; $p = 0.00$); Levi's_{ba} (4.27 attack > 1.26 play; $p = 0.00$); they also confirmed that variation between artist and consumer co-creation and the manipulation of the art work were significant for both brands: Nike_{artist vs consumer} (4.06 > 2.17; $p = 0.00$) – Nike_{art work vs no art} (3.67 > 2.11; $p = 0.00$); Levi's_{artist vs consumer} (3.84 > 1.95; $p = 0.00$) – Levi's_{art work vs no art} (3.51 > 2.07; $p = 0.00$).

Findings

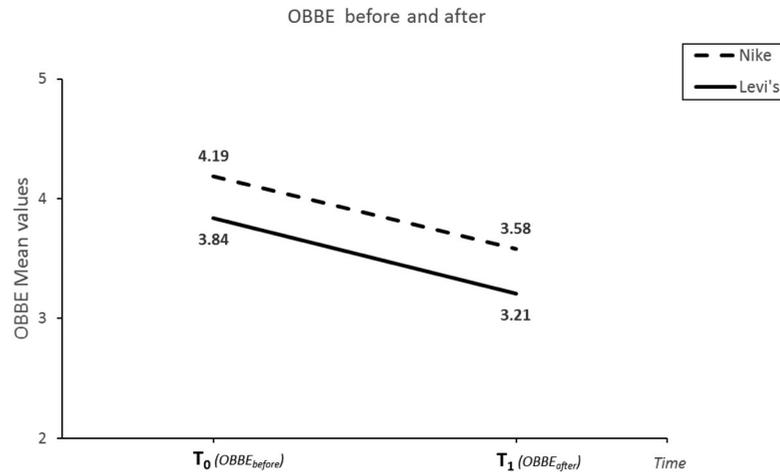
A repeated-measures ANOVA tested the postulated framework, finding that there was a significant pre-post difference in OBBE values for Levi's and Nike. *H1* can be accepted for both brands as non-collaborative co-creation affected OBBE negatively, as shown in Figure 2. In the case of Nike [F (1,242) = 101.139, $p = 0.000$], the extent of dilution was 0.61 (OBBE_{before} 4.19 > OBBE_{after} 3.58); for Levi's [F (1,246) = 138.877, $p = 0.000$], it was 0.63 (OBBE_{before} 3.84 > OBBE_{after} 3.21). There was no interaction effect between the form of treatment or type of non-collaborative co-creator for either Nike [F (1,242) = 0.266, $p = 0.606$] or Levi's [F (1,246) = 0.778, $p = 0.379$]. We can therefore proceed to the testing of the remaining hypotheses.

H2 was supported for both tested brands, so it can be stated that the form of non-collaborative co-creation does moderate the effect on OBEE. In the case of Nike [F (1,242) = 110.827, $p = 0.000$; $\eta_p^2 = 0.314$], in particular, brand play affected OBBE marginally. The dilution of -0.03 (OBBE_{before} 4.16 < OBBE_{after} 4.19) points to a slight positive effect of brand play on OBBE. The brand attack format caused a definite dilution of 1.23 (OBBE_{before} 4.23 > OBBE_{after} 3.00). For Levi's [F (1, 246) = 70. 378, $p = 0.000$; $\eta_p^2 = 0.222$], the dilution resulting from the brand play treatment was 0.16 (OBBE_{before} 3.82 > OBBE_{after} 3.66), while that attributable to brand attack was 1.13 (OBBE_{before} 3.86 > OBBE_{after} 2.73). *H3* was supported for both brands, and it can therefore be stated that the type of co-creator type does moderate the effect on OBBE. The results for Nike [F (1,242) = 23.589, $p = 0.000$; $\eta_p^2 = 0.089$] were that believing the co-creator to be a consumer brought about a dilution of 0.94 (OBBE_{before} 4.24 > OBBE_{after} 3.30) and believing him to be an artist a figure of 0.25 (OBBE_{before}

Table II Scales for the measurement of OBBE

Theme	Question	Source
Brand awareness	I can recognise Brand X among other competing brands	Yoo and Donthu (2001) Atilgan <i>et al.</i> (2005) Bravo Gil <i>et al.</i> (2007)
Brand associations	Some characteristics of Brand X come to my mind quickly I can quickly recall the symbol or logo of Brand X	Yoo and Donthu (2001) Atilgan <i>et al.</i> (2005) Bravo Gil <i>et al.</i> (2007)
Perceived quality	Brand X is good quality Brand X performs well	Atilgan <i>et al.</i> (2005) Lehmann <i>et al.</i> (2008)
Innovation	Brand X is innovative Brand X constantly improves its products	Lehmann <i>et al.</i> (2008)
Differentiation	Brand X stands out from its competitors Brand X is in a class by itself	Lehmann <i>et al.</i> (2008)
Relevance	Brand X is relevant to me Brand X fits my lifestyle	Lehmann <i>et al.</i> (2008)

Figure 2 OBBE before and after experimental treatments



4.14 > OBBE_{after} 3.89). For Levi's [F (1,246) = 18.298, p = 0.000; η_p² = 0.069], belief in a consumer co-creator resulted in a dilution of 0.92 (OBBE_{before} 3.82 > OBBE_{after} 2.90), while the value if the co-creator was presented as an artist was 0.36 (OBBE_{before} 3.85 > OBBE_{after} 3.49).

The dilution measured in the four sub-groups is shown in Table III. In the case of the brand play treatment of Nike, representing it as the work of a consumer co-creator led to a dilution of 0.22 (OBBE_{before} 4.25 > OBBE_{after} 4.03), while the belief that it was the work of an artist resulted in a value of -0.28 (OBBE_{before} 4.07 < OBBE_{after} 4.35). These results indicate a before-and-after diminution and improvement in OBBE. The combination of brand attack and non-collaborative co-creation by a consumer resulted in a dilution of 1.49 (OBBE_{before} 4.23 > OBBE_{after} 2.74); the value for the artist co-creator was 0.87 (OBBE_{before} 4.22 > OBBE_{after} 3.35). With respect to Levi's, dilution brought about by the brand play treatment being attributed to a consumer co-creator was 0.38 (OBBE_{before} 3.80 > OBBE_{after} 3.42). There was no measurable dilution if the co-creator was said to be an artist (OBBE_{before} 3.83 = OBBE_{after} 3.83). The brand attack treatment attributed to a consumer co-creator resulted in a dilution of 1.39 (OBBE_{before} 3.85 > OBBE_{after} 2.46); when the co-creator was believed to be an artist, the dilution was 0.83 (OBBE_{before} 3.87 > OBBE_{after} 3.04).

General discussion

Theoretical implications

The academic literature contains a large corpus of research on the beneficial effects of co-creation on the product or the brand. It does not, however, offer sufficient evidence of consequences and brand-related effects if co-creation "goes wrong". The findings of our study confirm the theoretical proposition that the phenomenon of co-creation of a brand entails loss of control to some extent over public perceptions of the brand's meanings, which can be steered in directions unintended by an original branding strategy.

Our study identified, described and defined the phenomenon of non-collaborative co-creation to clarify the process by which brand meanings can be subverted during co-creation. In particular, we conceptualised two forms of co-creation: *brand play* as the playful parodying of brand meanings, as suggested by Fournier and Avery (2011), and *brand attack* as the expression of negative emotions or even hate for the brand, as identified by Demirbag-Kaplan et al. (2015) and Hegner et al. (2017). Our study joins a small number of others to explicitly analyse the effect of negative co-creation, for example, those by Echeverri, and Skalen (2011), Gebauer et al. (2013) or Greer (2015). It is the very first, to the best of our knowledge, to explore how that affects observers' perceptions of brand equity. Our findings can be extremely valuable, given that the creation of brand-related parodies and the expression of negativity

Table III Dilution of OBBE after experimental treatments

Brands	Consumer/play	Consumer/attack	Artist/play	Artist/attack
Nike				
OBBE _{before}	4.25	4.23	4.07	4.22
OBBE _{after}	4.03	2.74	4.35	3.35
Dilution (before-after)	0.22	1.49	-0.28	0.87
Levi's				
OBBE _{before}	3.8	3.85	3.83	3.87
OBBE _{after}	3.42	2.46	3.83	3.04
Dilution (before-after)	0.38	1.39	0.00	0.83

towards brands together represent a current and developing trend in co-creation (Fournier and Alvarez, 2013; Cova and D'Antone, 2016; Veloutsou and Guzman, 2017). Our study shows that co-creation which goes wrong is strongly driven by risk-affecting brands in general and high-equity brands in particular. Brand meanings created by non-collaborative co-creators are starting to compete with the brand meanings that brand managers have set out initially created through their branding strategies. Thus, in contrast to the characteristically positive tenor of brand co-creation studies, we have come to a contrasting conclusion with regards to its effect. We found that a "brand attack" co-creation mode caused a stronger dilution of OBBE than "brand play", and that co-creation by consumers caused a stronger dilution than that executed by artists. To be precise, brand play by a consumer resulted in lesser before-after dilution of OBBE than brand attack by the same co-creator. The result of brand play by an artist was either a positive improvement in OBBE or no measurable effect at all. Our findings are therefore in line with those of previous studies on effects of art on brands, such as that by Hagvedt and Patrick (2008a).

Our study furthermore answers two specific needs identified by previous researchers: first, for more and better research on the inherent risks and dangers of co-creation (Plé and Chumpitaz Cáceres, 2010; Echeverri and Skalen, 2011; Gebauer *et al.*, 2013; Greer, 2015); second, for more studies of independent observers of co-creation to extend the limited body of knowledge about their responses (Ind *et al.*, 2013; Fuchs *et al.*, 2013).

Managerial implications

Co-creation marks a shift from management-oriented brand building to a collaborative process in which stakeholders become increasingly empowered. In its non-collaborative form, it can disrupt brand managers' efforts to strengthen the brand and load it with powerful meaning. Subverted versions of those meanings can begin to compete with the original concepts communicated via marketing campaigns and generate what has been described in the literature as a "doppelgänger" brand meaning (Giesler, 2012), which can potentially be caused by either brand play or brand attack and can lead to a significant dilution of observers' evaluation of the brand's equity. There is thus a strategic need for non-collaborative co-creation to be monitored and managed, especially when it takes the brand attack form and initial brand meanings begin to be damaged by virally dispersed unflattering brand meanings. Brand strategists must become familiar with viral environments, such as the blogosphere or brand communities, and monitor those regularly for evidence of anti-brand sentiments. IBM's *Social Sentiment Index*, for instance, aggregates and gauges content from a range of social media platforms, distinguishing sarcastic and negative opinion from sincere and positive commentary and identifying such specific trends as critical and disruptive material (www.ibm.com, 2016).

However, echoing the conclusion of Popp *et al.* (2016) with respect to anti-brand communities, we propose that non-collaborative brand co-creation also sounds a wake-up call for brand managers to make the necessary improvements. Early warning of the subversion of brand meanings can provide strategists with insights that could be usefully applied to branding activities capable of strengthening the brand and

thereby rendering non-collaborative behaviour beneficial for the brand and its meaning.

Brand-related parodies could be a sign of much-coveted cultural resonance for the original brand meaning (Fournier and Alvarez, 2013), particularly when they have been executed by artists. Our study has found that "brand play" initiatives executed by artists can have a positive effect on OBBE. We therefore advise practitioners to think about intentional cooperation with artists to the extent of suggesting that they playfully engage in brand co-creation. Many well-known companies do in fact invite artists to engage in various co-creation processes. For example, as long ago as 1975, BMW began to invite famous artists to propose their own model designs, which are exhibited in a company museum and at art exhibitions around the world; in 1985, the Swedish vodka brand Absolut invited Andy Warhol to play with the design of their bottle; in 2014, the luxury fashion brand Louis Vuitton opened its own art museum after a decade of involving artist and architects in the creation of limited editions, the design of their shops and other communications in general.

Limitations and further research

Although our study offers a more complete insight into how non-collaborative co-creation affects OBBE than can be gleaned from the literature to date, certain limitations need to be taken into account, which in turn suggest directions for further research.

The results of the analyses of the empirical data should be treated with appropriate caution, given that the participants in the study were university students, mostly studying business administration and economics. The risk of generalising from that sample is mitigated by the fact that students do represent a significant proportion of the target markets for the brands chosen to be the experimental stimuli. Also, our study was not concerned with the generalisability of our results to other populations but rather was focussed on theory testing with respect to an unknown effect; a highly homogenous sample was accordingly appropriate. Though the results could therefore be of interest and use to Nike and Levi's, and to other companies targeting similar markets, it would nevertheless be advisable to replicate our study with a more heterogeneous sample.

Our paper has not commented on the dimensionality of value co-creation behaviour and its conceptual richness. Further research could usefully explore how value co-creation dimensions, particularly customer participation behaviour and citizenship behaviour, relate to an unsuccessful outcome of the co-creation process. It would be very valuable to focus on the role of customer behaviour in value co-creation to detect weaknesses in the process. Future research could investigate exactly what customer participation and customer citizenship behaviour need to look like so that the value co-creation process itself is successful (Yi *et al.*, 2011; Yi and Gong, 2013). Such insights would also help strategists to understand which forms of co-creator behaviour lead to undesired outcomes.

Another issue for future research is the intensity of non-collaborative co-creation. In our study, participants read descriptions and discussion of the co-created material in (purpose-written) newspaper articles, which are generally considered to be a fairly a low-engagement medium. The effect on OBBE might possibly be greater if the experience and intensity of non-collaborative co-creation are stronger.

Consider the "Dismaland" project organised by the celebrated graffiti artist Banksy, a pop-up parody of an amusement park on a run-down site in a faded seaside resort in the south-west of England, featuring grumpy guards, funereal theme park games and negatively provocative artworks by about 60 international artists. Visitors walking through the creation were part of the experience. This high level of experience and the high-involvement nature of the non-collaboratively co-created images might be expected to intensify the effect, presumably negative, that they had on the visitor-observers.

With regards to artists as co-creators, it would be interesting to investigate whether payment for their participation yielded a different result in terms of OBBE from non-paid co-creation. In the scenario of our study, the artist co-creator was not engaged by the organisation but had subverted the stimulus materials without the company's knowledge and consent. In practice, many companies today do purposely integrate artists into their creative and communicative operations with the express intention of benefiting the brand. A future study could test how independent observers perceive such paid-for integration of artists into promotion of a brand. Some might feel that payment removes the freedom and creativity, normally characterising art, and hence diminishes the positive effect of artist co-creators.

In our study, participants learnt about non-collaborative brand co-creation via newspaper articles. A future investigation could test whether the form of non-collaborative co-creation and the type of co-creator have a different potential to make the co-created material go viral and, if so, whether there would be a corresponding influence on the established effect on OBBE. For instance, brand attack might be more likely to be noticed by observers than brand play. Similarly, co-creation by artists might bring about a weaker dilution in OBBE than co-creation by consumers. However, if the work of the former reaches more observers online and offline than the initiatives of the latter, the more widespread perception of the subversion should also generate a stronger dilution.

Finally, our scenario invoked direct distortion of two brand logos and associated visual treatments. The possibility exists, however, that a brand might be used as metaphorical element on the basis of which to make a critical socio-political statement; the brand itself is not the primary goal of the attack, but only the means to an end. For instance, a painting by a Dutch artist depicted an obviously starving African boy holding a Louis Vuitton handbag and a chihuahua. The intention was that the juxtaposition of the handbag, symbolising Western affluence with African starvation would draw attention to the socio-political situation in Dafur. Similarly, the aim of a painting of a squashed Coca-Cola can by a Russian-German artist was not to attack the brand but to highlight pollution and the throwaway mentality of consumers. The question is whether such indirect brand attacks have any effect on OBBE and, if so, if the effect is any different from the results of our experiment.

References

Aaker, D., Stayman, D. and Vezina, R. (1988), "Identifying feelings elicited by advertising", *Psychology and Marketing*, Vol. 5 No. 1, pp. 1-16.

Alba, J.W. and Hutchinson, J.W. (1987), "Dimensions of consumer expertise", *Journal of Consumer Research*, Vol. 13 No. 4, pp. 411-454.

Alden, D., Mukherjee, A. and Hoyer, W. (2000), "The effects of incongruity, surprise and positive moderators on perceived humor in television advertising", *Journal of Advertising*, Vol. 29 No. 2, pp. 1-15.

Atilgan, E., Aksoy, S. and Akinci, S. (2005), "Determinants of the Brand equity: a verification approach in the beverage industry in Turkey", *Marketing Intelligence & Planning*, Vol. 23 No. 3, pp. 237-248.

Atkinson, L. and Rosenthal, S. (2014), "Signaling the green sell: the influence of eco-label source, argument specificity, and product involvement on consumer trust", *Journal of Advertising*, Vol. 43 No. 1, pp. 33-45.

Bambauer-Sachse, S. and Mangold, S. (2011), "Brand equity dilution through negative online word-of-mouth communication", *Journal of Retailing and Consumer Services*, Vol. 18 No. 1, pp. 38-45.

Black, I. and Veloutsou, C. (2017), "Working consumers: co-creation of Brand identity, consumer identity and Brand community identity", *Journal of Business Research*, Vol. 70, pp. 416-429.

Blazenhoff, R. (2012), "Fat Tony vinyl figure by Ron English satirizes Kellogg's Tony the Tiger", available at: <http://laughingsquid.com/fat-tony-vinyl-figure-by-ron-english-satirizeskelloggs-tony-the-tiger/> (accessed 17 October 2015).

Borghini, S., Visconti, L., Anderson, L. and Sherry, J. Jr. (2010), "Symbiotic postures of commercial advertising and street art", *Journal of Advertising*, Vol. 39 No. 3, pp. 113-126.

Bravo Gil, R., Fraj Andrés, E. and Martínez Salinas, E. (2007), "Family as a source of consumer-based Brand equity", *Journal of Product & Brand Management*, Vol. 16 No. 3, pp. 188-199.

Calder, B. and Tybout, A.M. (1999), "A vision of theory, research, and the future of business schools", *Journal of the Academy of Marketing Science*, Vol. 27 No. 3, pp. 359-366.

Calder, B., Phillips, L. and Tybout, A. (1983), "Beyond external validity", *Journal of Consumer Research*, Vol. 10 No. 1, pp. 112-114.

Carrilat, F.A., D'astous, A. and Colbert, F. (2008), "The effectiveness of art venue sponsorship: an attribution perspective", *Journal of Sponsorship*, Vol. 1 No. 3, pp. 274-285.

Chang, W. and Taylor, S. (2016), "The effectiveness of customer participation in new product development: a meta-analysis", *Journal of Marketing*, Vol. 80 No. 1, pp. 47-64.

Chatzipanagiotou, K., Veloutsou, C. and Christodoulides, G. (2016), "Decoding the complexity of the consumer-based brand equity process", *Journal of Business Research*, Vol. 69 No. 11, pp. 5479-5486.

Christodoulides, G., Cadogan, J. and Veloutsou, C. (2015), "Consumer-based Brand equity measurement: lessons learned from an international study", *International Marketing Review*, Vol. 32 Nos 3/4, pp. 307-328.

Cova, B. and D'Antone, S. (2016), "Brand iconicity vs anti-consumption well-being concerns: the Nutella palm oil conflict", *Journal of Consumer Affairs*, Vol. 50 No. 1, pp. 166-192.

Cova, B. and Pace, S. (2006), "Brand community of convenience products: new forms of customer empowerment – the case my Nutella the community", *European Journal of Marketing*, Vol. 40 Nos 9/10, pp. 1087-1105.

- Cova, B. and Paraque, B. (2016), "Value slippage in Brand transformation: a conceptualization", *Journal of Product & Brand Management*, Vol. 25 No. 1, pp. 3-10.
- Cova, B. and White, T. (2010), "Counter-Brand and alter-Brand communities: the impact of web 2.0 on tribal marketing approaches", *Journal of Marketing Management*, Vol. 26 Nos 3/4, pp. 256-270.
- Cui, A. and Wu, F. (2016), "The impact of customer involvement on new product development: Contingent and substitutive effects", *Journal of Product Innovation Management*, Vol. 34 No. 1, pp. 60-80.
- Dawar, N. and Pillutla, M.M. (2000), "Impact of product-harm crises on Brand equity: the moderating role of consumer expectations", *Journal of Marketing Research*, Vol. 37 No. 2, pp. 215-226.
- Demirbag-Kaplan, M., Yildirim, C., Gulden, S. and Aktan, D. (2015), "I love to hate you: loyalty for disliked brands and the role of nostalgia", *Journal of Brand Management*, Vol. 22 No. 2, pp. 136-153.
- Dessart, L., Morgan-Thomas, A. and Veloutsou, C. (2016), "What drives anti-brand community behaviours: an examination of online hate of technology brands", in Obal, M., Krey N. and Bushardt, C. (Eds), *Let's Get Engaged! Crossing the Threshold of Marketing's Engagement Era*, Springer International, New York, pp. 473-477.
- Dessart, L., Veloutsou, C. and Morgan-Thomas, A. (2015), "Consumer engagement in online Brand communities: a social media perspective", *Journal of Product & Brand Management*, Vol. 24 No. 1, pp. 28-42.
- Duggan, M., Ellison, N., Lampe, C., Lenhart, A. and Madden, M. (2014), "Social media update 2014", Pew Research Center, available at: www.pewinternet.org/2015/01/09/social-media-update-2014/ (accessed May 01 2017).
- Dutta, S. and Pullig, C. (2011), "Effectiveness of corporate responses to Brand crises: the role of crisis type and response strategies", *Journal of Business Research*, Vol. 64 No. 12, pp. 1281-1287.
- Echeverri, P. and Skalen, P. (2011), "Co-creation and co-destruction: a practice-theory based study of interactive value formation", *Marketing Theory*, Vol. 11 No. 3, pp. 351-373.
- Fournier, S. and Alvarez, C. (2013), "Relating badly to brands", *Journal of Consumer Psychology*, Vol. 23 No. 2, pp. 253-264.
- Fournier, S. and Avery, J. (2011), "The uninvited Brand", *Business Horizons*, Vol. 54 No. 3, pp. 193-207.
- Fuchs, C., Prandelli, E., Schreier, M. and Dahl, D. (2013), "All that is users might not be gold: How labeling products as user designed backfires in the context of luxury fashion brands", *Journal of Marketing*, Vol. 77 No. 5, pp. 75-91.
- Gebauer, J., Fuller, J. and Pezzeri, R. (2013), "The dark and the bright side of co-creation: triggers of member behavior in online innovation communities", *Journal of Business Research*, Vol. 66 No. 9, pp. 1516-1527.
- Giesler, M. (2012), "How doppelganger Brand images influence the market creation process: longitudinal insights from the rise of botox cosmetic", *Journal of Marketing*, Vol. 76 No. 6, pp. 55-68.
- Greer, D.A. (2015), "Defective co-creation: developing a typology of consumer dysfunction in professional services", *European Journal of Marketing*, Vol. 49 Nos 1/2, pp. 238-261.
- Gyrd-Jones, R. and Kornum, N. (2013), "Managing the co-created brand: value and cultural complementarity in online and offline multi-stakeholder ecosystems", *Journal of Business Research*, Vol. 66 No. 9, pp. 1484-1493.
- Hagtvedt, H. and Patrick, V. (2008a), "Art infusion: The influence of visual art on the perception and evaluation of consumer products", *Journal of Marketing Research*, Vol. 45 No. 3, pp. 379-389.
- Hagtvedt, H. and Patrick, V.M. (2008b), "Art and the Brand: the role of visual art in enhancing brand extendibility", *Journal of Consumer Psychology*, Vol. 18 No. 3, pp. 212-222.
- Harold, C. (2004), "Pranking rhetoric: culture jamming as media activism", *Critical Studies in Media Communication*, Vol. 21 No. 3, pp. 189-211.
- Hatch, M.J. and Schultz, M. (2010), "Towards a theory of brand co-creation with implications for brand governance", *Journal of Brand Management*, Vol. 17 No. 8, pp. 590-604.
- Hegner, S., Fetscherin, M. and van Delzen, M. (2017), "Determinants and outcomes of brand hate", *Journal of Product & Brand Management*, Vol. 26 No. 1, pp. 13-25.
- Hollebeek, L. and Chen, T. (2014), "Exploring positively-versus negatively-valenced Brand engagement: a conceptual model", *Journal of Product & Brand Management*, Vol. 23 No. 1, pp. 62-74.
- Hollenbeck, C.R. and Zinkhan, G.M. (2006), "Consumer activism on the internet: the role of anti-Brand communities", *Advances in Consumer Research*, Vol. 33, pp. 479-485.
- Hollenbeck, C.R. and Zinkhan, G. (2010), "Anti-Brand communities, negotiation of brand meaning, and the learning process: the case of Wal-Mart", *Consumption Markets and Culture*, Vol. 13 No. 3, pp. 325-345.
- How-todotcom. (2011), "Henkel has trouble with Pril competition on Facebook", available at: <http://how-todotcom.blogspot.de/2011/05/henkel-has-trouble-with-pril.html> (accessed 16 October 2015).
- Iezzi, T. and Wheaton, K. (2007), "Advertising has been seen as art, now art used as marketing tool", *Advertising Age*, Vol. 78 No. 15, p. 16.
- Iglesias, O., Ind, N. and Alfaro, M. (2013), "The organic view of the brand: a brand value co-creation model", *Journal of Brand Management*, Vol. 20 No. 8, pp. 670-688.
- Ind, N. (2014), "How participation is changing the practice of managing brands", *Journal of Brand Management*, Vol. 21 No. 9, pp. 734-742.
- Ind, N. and Coates, N. (2013), "The meanings of co-creation", *European Business Review*, Vol. 25 No. 1, pp. 86-95.
- Ind, N., Iglesias, O. and Schultz, M. (2013), "Building brands together", *California Management Review*, Vol. 55 No. 3, pp. 5-26.
- Jacoby, J., Troutman, T., Kuss, A. and Mazursky, D. (1986), "Experience and expertise in complex decision making", *Advances in Consumer Research*, Vol. 13, pp. 469-472.
- Joy, A. and Sherry, J.F. Jr. (2003), "Speaking of art as embodied imagination: a multisensory approach to understanding aesthetic experience", *Journal of Consumer Research*, Vol. 30 No. 2, pp. 259-282.
- Kaufmann, H., Loureiro, S. and Manarioti, A. (2016), "Exploring behavioural branding, brand love and brand

- co-creation", *Journal of Product & Brand Management*, Vol. 25 No. 6, pp. 516-526.
- Keller, K.L. (2003), "Brand synthesis: the multidimensionality of consumer knowledge", *Journal of Consumer Research*, Vol. 29 No. 4, pp. 595-600.
- Kennedy, E. (2017), "I create, you create, we all create: for whom?", *Journal of Product & Brand Management*, Vol. 26 No. 1, pp. 68-79.
- Klein, N. (1999), *No logo: Taking aim at the Brand Bullies*, Picador, New York.
- Kozinets, R.V. and Handelman, J.M. (2004), "Adversaries of consumption: consumer movements, activism, and ideology", *Journal of Consumer Research*, Vol. 31 No. 3, pp. 691-704.
- Kristal, S., Baumgarth, C., Behnke, C. and Henseler, J. (2016), "Is co-creation really a booster for Brand equity? the role of co-creation in observer-based Brand equity", *Journal of Product & Brand Management*, Vol. 25 No. 3, pp. 247-261.
- Lacey, S., Hagtvedt, H., Patrick, V.M., Anderson, A., Stilla, R., Deshpande, G., Hu, X., Sato, J.R., Reddy, S. and Sathian, K. (2011), "Art for reward's sake: visual art recruits the ventral striatum", *Neuroimage*, Vol. 55 No. 1, pp. 420-433.
- Lee, H.C., Chen, W.W. and Wang, C.W. (2015), "The role of visual art in enhancing perceived prestige of luxury brands", *Marketing Letters*, Vol. 26 No. 4, pp. 593-606.
- Lehmann, D., Keller, K. and Farley, J. (2008), "The structure of survey-based brand metrics", *Journal of International Marketing*, Vol. 16 No. 4, pp. 29-56.
- McNicholas, B. (2004), "Arts, culture and business: a relationship transformation, a nascent field", *International Journal of Arts Management*, Vol. 7 No. 1, pp. 57-69.
- Mermiri, T. (2010), "Arts sponsorship: the facts, trends, and potential", *Journal of Sponsorship*, Vol. 3 No. 3, pp. 307-320.
- Merz, M.A., He, Y. and Vargo, S.L. (2009), "The evolving Brand logic: a service dominant logic perspective", *Journal of the Academy of Marketing Science*, Vol. 37 No. 3, pp. 328-344.
- Muniz, A.M. and O'Guinn, T.C. (2001), "Brand community", *Journal of Consumer Research*, Vol. 27 No. 4, pp. 412-432.
- Peterson, R. (2001), "On the use of college students in social science research: Insights from a second-order Meta-analysis", *Journal of Consumer Research*, Vol. 28 No. 3, pp. 450-461.
- Peterson, R. and Merunka, D. (2014), "Convenience samples of college students and research reproducibility", *Journal of Business Research*, Vol. 67 No. 5, pp. 1035-1041.
- Petrus-wandrey.com. (2015), "Sabatier-Galerie-und-Kunsthandel", available at: www.petrus-wandrey.com/alist.php?cat_id=3 (accessed 17 October 2015).
- Plé, L. and Chumpitaz Cáceres, R. (2010), "Not always cocreation: introducing interactional codestruction of value in servicedominant logic", *Journal of Services Marketing*, Vol. 24 No. 6, pp. 430-437.
- Popp, B., Germelmann, C. and Jung, B. (2016), "We love to hate them! social media-based anti-Brand communities in professional football", *International Journal of Sports Marketing and Sponsorship*, Vol. 17 No. 4, pp. 349-367.
- Prahalad, C.K. and Ramaswamy, V. (2004), "Co-creation experiences: the next practice in value creation", *Journal of Interactive Marketing*, Vol. 18 No. 3, pp. 5-14.
- Pullig, C., Simmons, C. and Netemeyer, R. (2006), "Brand dilution: when do new brands hurt existing brands?", *Journal of Marketing*, Vol. 70 No. 2, pp. 52-66.
- Quester, P.G. and Thompson, B. (2001), "Advertising and promotion leverage on arts sponsorship effectiveness", *Journal of Advertising Research*, Vol. 41 No. 1, pp. 33-47.
- Rauschnabel, P., Kammerlander, N. and Ivens, B. (2016), "Collaborative brand attacks in social media: exploring the antecedents, characteristics, and consequences of a new form of Brand crises", *Journal of Marketing Theory and Practice*, Vol. 24 No. 4, pp. 381-410.
- Reynolds, N., Simintiras, A. and Diamantopoulos, A. (2002), "Theoretical justification of sampling choices in international marketing research: key issues and guidelines for researchers", *Journal of International Business Studies*, Vol. 34 No. 1, pp. 80-89.
- Roedder-John, D., Loken, B. and Joiner, C. (1998), "The negative impact of extensions: Can flagship products be diluted?", *Journal of Marketing*, Vol. 62 No. 1, pp. 19-32.
- Romani, S., Grappi, S., Zarantonello, L. and Bagozzi, R. (2015), "The revenge of the consumer! how brand moral violations lead to consumer anti-brand activism", *Journal of Brand Management*, Vol. 22 No. 8, pp. 658-672.
- Rössner, A., Kämmerer, M. and Eisend, M. (2017), "Effects of ethnic advertising on consumers of minority and majority groups: the moderating effect of humor", *International Journal of Advertising*, Vol. 36 No. 1, pp. 190-205.
- Rumbo, J. (2002), "Consumer resistance in a world of advertising clutter: the case of Adbusters", *Psychology and Marketing*, Vol. 19 No. 2, pp. 127-148.
- Saleem, F. and Iglesias, O. (2016), "Mapping the domain of the fragmented field of internal branding", *Journal of Product & Brand Management*, Vol. 25 No. 1, pp. 43-57.
- Sandlin, J. and Milam, J. (2008), "Mixing pop (culture) and politics: cultural resistance, culture jamming, and anti-consumption activism as critical public pedagogy", *Curriculum Inquiry*, Vol. 38 No. 3, pp. 323-350.
- Schwaiger, M., Sarstedt, M. and Taylor, C.R. (2010), "Art for the sake of the corporation: Audi, BMW group, DaimlerChrysler, Montblanc, Siemens, and Volkswagen help explore the effect of sponsorship on corporate reputations", *Journal of Advertising Research*, Vol. 50 No. 1, pp. 77-90.
- Tanner, J.F., Jr., Hunt, J.B. and Eppright, D.R. (1991), "The protection motivation model: A normative model of fear appeals", *Journal of Marketing*, Vol. 55 No. 3, pp. 36-45.
- Theeboom, S. (2015), "Lesbian, Hitler, and other things you can't say on a jar of Nutella", available at: <http://firstwfeast.com/eat/lesbian-hitler-and-other-things-you-cant-say-on-a-jar-of-nutella/> (accessed 17 October 2015).
- Thompson, C., Rindfleisch, A. and Arsel, Z. (2006), "Emotional branding and the strategic value of the doppelgänger brand image", *Journal of Marketing*, Vol. 70 No. 1, pp. 50-64.
- Vallaster, C. and von Wallpach, S. (2013), "An online discursive inquiry into the social dynamics of multi-stakeholder Brand meaning co-creation", *Journal of Business Research*, Vol. 66 No. 9, pp. 1505-1515.
- Veloutsou, C. (2009), "Brands as relationship facilitators in consumer markets", *Marketing Theory*, Vol. 9 No. 1, pp. 127-130.

- Veloutsou, C. and Guzman, F. (2017), "The evolution of Brand management thinking over the last 25 years as recorded in the journal of product and Brand management", *Journal of Product & Brand Management*, Vol. 26 No. 1, pp. 2-12.
- Von Hippel, E. (2009), "Democratizing innovation: the evolving phenomenon of user innovation", *International Journal of Innovation Science*, Vol. 1 No. 1, pp. 29-40.
- Von Wallpach, S., Voyer, B., Kastanakis, M. and Mühlbacher, H. (2017), "Co-creating stakeholder and Brand identities: Introduction to the special section", *Journal of Business Research*, Vol. 70, pp. 395-398.
- www.ibm.com (2016), "IBM social sentiment analysis powered by IBM analytics", available at: www.ibm.com/analytics/in/en/conversations/social-sentiment.html (accessed 11 May 2016).
- Yi, Y. and Gong, T. (2013), "Customer value co-creation behavior: scale development and validation", *Journal of Business Research*, Vol. 66 No. 9, pp. 1279-1284.
- Yi, Y., Natarajan, R. and Gong, T. (2011), "Customer participation and citizenship behavioral influences on employee performance, satisfaction, commitment, and turnover intention", *Journal of Business Research*, Vol. 64 No. 1, pp. 87-95.

- Yoo, B. and Donthu, N. (2001), "Developing and validating a multidimensional consumer-based Brand equity scale", *Journal of Business Research*, Vol. 52 No. 1, pp. 1-14.
- Zarantonello, L., Romani, S., Grappi, S. and Bagozzi, R. (2016), "Brand hate", *Journal of Product & Brand Management*, Vol. 25 No. 1, pp. 11-25.

Further reading

- Gregory, A. (2007), "Involving stakeholders in developing corporate brands: the communication dimension", *Journal of Marketing Management*, Vol. 23 Nos 1/2, pp. 59-73.
- Hagtvedt, H., Hagtvedt, R. and Patrick, V.M. (2008), "The perception and evaluation of visual art", *Empirical Studies of the Arts*, Vol. 26 No. 2, pp. 197-218.
- Hennig-Thurau, T., Gwinner, K., Walsh, G. and Gremler, D. (2004), "Electronic word-of-mouth via consumer-opinion platforms: what motivates consumers to articulate themselves on the internet?", *Journal of Interactive Marketing*, Vol. 18 No. 1, pp. 38-52.

Appendix

Table A1 Distorted logos and visuals used in the experimental study

Brands	Brand play	Brand attack
Nike	Swoosh shown in moustache form. Claim on picture: <i>Moustache Just shave it</i>	Regular swoosh is shown. Claim on picture: <i>Child labour Just stop it</i>
Levi's	Elvis Presley shown on picture and Levi's logo is transformed to <i>Elvis</i>	Young girl is shown sewing clothes. Logo on picture says <i>Levi's</i>

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