Changing Affective Content in Brand and Product Attributes

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Abstract

Purpose

This paper explores whether consumers cognitive reactions to a branded product remain stable over time. In many created concepts, entity attributes are such that cognitive reactions to them change in a predictable manner by attraction to elements of novelty and typicality in the genre. By analysing products from a luxury vehicle brand, under the framework of a theoretical model of changing 'affective content', this paper explores whether brands behave similarly.

Methodology / approach

The study draws upon research previously published into the changing nature of art, poetry, architecture and other artistic genres. Text from motoring press articles written contemporarily to the production of products of the brand, over the past 80 years, are analysed for constructs of affective content and the overall values expressed.

Findings

The results provide evidence that the attributes of some branded products produce cognitive conditions that cycle in a manner that is predictable, with change points corresponding to new product introductions.

Practical implications

Through understanding cognitive reactions to the branded product, that may be discreetly deconstructable and anticipated, advantageous product attribute development can progress with some certainty. Further, new product launches can be timed to coincide with receptive consumer conditions supported by appropriate attribute emphasis.

Originality / value

This paper applies a theory, which has been proven to exist in a number of artistic genres, to the brand for the first time. Its contribution is twofold; firstly, to expand developing knowledge into the

cognitive processing of the branded product; and secondly, to introduce an informative process to product and brand development activities.

Keywords

Brands, Categories, Artistic Change.

Paper type

Research paper.

Introduction

The cognitive processing of an agreement that attractiveness exists appears mediated by rational and emotive benefits derived by the interaction with, and the assessment of, an entity's attributes. These attributes are multi-sensory stimuli that for branded products, and some other created concepts, arouse rational benefits that may include price value, utility or 'must-be' qualities, and emotive benefits that exist in cognitive association effects that may include, for example, brand values, aesthetic appeal, and personal esteem or social belonging. One important component within the cognitive processing of product attributes leading toward emotive benefit appears to be the 'categorisation effect'; where the entity encountered is perceived to be an appropriate member of, and typical to, its intended category (either its product category, brand category, or both). This materialises from processes that follow cognitive efficiency principles, where associations embedded in a priori category knowledge are accessed to organise meaningful indicators about the entity. However, evidence suggests that the attractiveness of a product is also influenced by both attribute typicality and attribute novelty. Further, a component of optimum attractiveness appears to be a cognitive preference condition that is not stable, but one where attribute 'affective content' evolves as familiarity, or ubiquity, forces declining attractiveness in an established style. This phenomenon is well researched for many created concepts, particularly those in human artistic fields such as poetry and music, but not in others like brands. In fact, the increasing importance of differentiating brands by stimulating emotive benefits, particularly in segments where rational benefits are de-emphasised, like luxury goods, leads to an opportunity to more exhaustively understand brand affective content in the attractiveness assessment. This paper spends time discussing attribute affective content and the novelty-typicality relationship in an example brand's product lineage and provides evidence that under-pinning evolutionary laws of affective content established so far, also apply to the brand in this case. By developing the brand's constituent affective content trends, attribute stimuli conditions are understood, that may then inform the product design process and influence overall future attractiveness and brand-categorisation assessments. The paper concludes by discussing the implications of the model for product and brand development.

Product attractiveness

Consumer satisfaction can be modelled as a relationship between responses to the qualities of a product's attributes or properties that are; firstly, 'must-be'; and secondly, 'attractive' or 'appealing' (Kano et. al 1984). More recent commentary has identified product attractiveness in mature segments (like automobiles) leads to the emphasis of the second dimension in this model, elevating the significance of multi-sensory product properties, their cognitive processing and causal effects, to maximise potential consumer satisfaction and product differentiation (Desmet, Hekkert & Jacobs 2000; Gobe 2001; Lindstrom 2005; Veryzer & Hutchinson 1998; Warell 2006), whilst others observe what is 'attractive', one day, can be relegated to 'must-be' the next (Schutte 2005; Shillito 2001; Abbott et. al. 2006).

The emergence of non-utilitarian differentiation in new product development prompts some attention within design, engineering and marketing functions to the theories of the cognitive processing of concepts; the exploration of the routes by which attributes or properties encountered stimulate recognition, categorisation, understanding and finally associational benefits or other psycho-physical outputs, applied to, and resulting from, the complete branded-product (Boush 1993; Franzen & Bouwman 2001; Henderson, Iacobucci & Calder 1998; Joiner & Loken 1998; Kreuzbauer & Malter 2005; Romaniuk & Sharp 2004). One objective of this interest is to both ensure and exploit the 'categorisation effect' such that the product is readily perceived to be both *good*, but more importantly, *right* for the brand. By developing a model, which takes the brand as a cognitive category as a central tenet, direct constituent property manipulation techniques have been identified that may affect the categorisation process of the product (the perception that the product fits within the brand category) and the typicality status of the example (the perception that the product is a good example of the brand category) (Abbott, Shackleton & Holland 2008). This, and other conceptual analysis models, habitually employ language as a medium of analysis, measurement, design and representation of categories, as a universal expression of cognitive productivity (Barsalou 1983; Evans 1988; Eco 1985; Millikan 1984; Pinker 2007) that can be used to describe and visualise the brand-category or product-category (Ratneshwar 1987), brand typicality (Abbott Shackleton & Holland 2008) or

product typicality, or brand differentiation and distinction (Carbon & Leder 2005; Mindak 1961; Rios et. al. 2006; Warlop, Ratneshwar & van Osselaer 2006). However, many concepts, including brand-category representations, appear not to be stable constructs; category boundaries are given to shift and segment, their prototypes change, or members' increase or decline (Lakoff 1987). Influences include technology, market and product type alterations, but perhaps most significantly in this case, the novelty-typicality relationship, whereby category representations are modified by the 'laws of novelty' and *simultaneously constrained* by propriety and typicality (Batra, Lenk & Wedel 2006; Moral 2007).

Theories of style change

Levels of cognitive 'arousal', reacting to the external stimuli of novelty, intricacy and variability evident within particular styles of poetry, art and architecture and some other created concepts, appear not to be stable over time (Martindale 1990); hedonic selection suggests we discard the unattractive entity to select new, novel and attractive versions until they are, themselves, superseded by something more novel and attractive still.

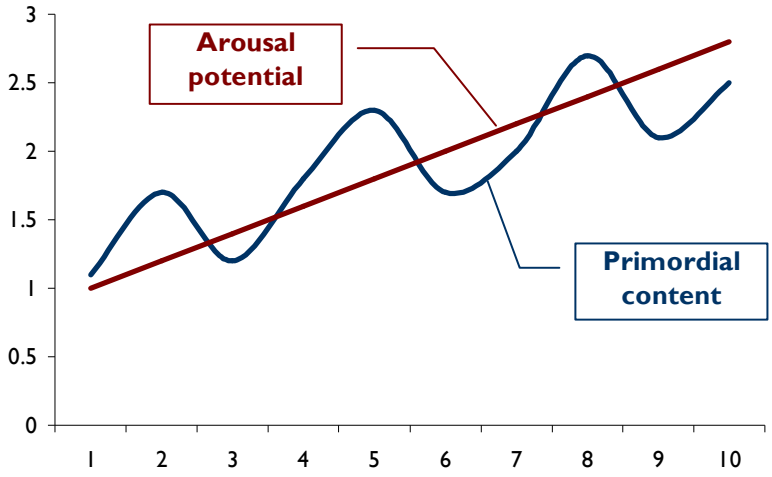

Figure 1. Typical change in 'primordial content' and 'arousal potential', over time, for artistic categories – arbitrary data, for illustrative purposes only (adapted from Martindale [1990]).

Underlying cognitive arousal and attractiveness of a style appears as a discreet characteristic of it; the instantiation of 'primordial thought' (free thinking, novel and irrational cognitive activity) contained and represented within a style varies cyclically. In written material the arousal potential of the text can be computed as a percentage of 'primordial content' to overall content (word count) included (Martindale 1990). In other fields, like architecture, Semantic Differentiation assessments (see Hiese 1970; Osgood, Suci & Tannenbaum 1957; Osgood, May & Miron 1975) can be conducted to quantify 'primordial values' (Martindale & Uemura 1983; Martindale 1986). Using either technique, artistic styles tend to produce a sine-curve type characteristic of increasing - decreasing 'primordial content' and cognitive 'arousal potential' that, over long periods, steadily increases (Figure 1). Within product design similar patterns can be observed corresponding to these characteristics. Consider, for example, the application of decorative chrome to Ford mid-sized family cars in the European market since the 1960's (Figure 2). Early applications of chrome were partially functional; flamboyant 'primordial' content nevertheless declined in the 1990's and has since begun to return. As degrees of novelty, variability and complexity in 'primordial content' are elaborative, emotive and stimulatory in attractiveness assessments (Martindale 1990), it is referred to subsequently in this paper as 'affective content'; a measure of the quantity of arousal stimuli in the concept representation.

Figure 2. Exterior chrome application, Ford mid-sized cars 1962 – 2007, European market.

The novelty-typicality relationship

Within product design, both novelty *and* typicality play important roles in attractiveness assessments (Hekkert, Snelders & van Wieringen 2003; Snelders & Hekkert 1999; Swann 2001; Veryzer & Hutchinson 1998); one that perhaps suggests a construct of 'typical-novelty', or newness with resemblances; *'a new car may look like a chicken, and this may be very unusual or new…*[but] *consumers may not like cars to look like chicken'* (Snelders & Hekkert 1999). Principles established within cognitive categorisation theory (Lakoff 1987; Rosch 1999) are mediating factors, as stable constructs of chickens and cars are highly desirable within human consciousness. However, for created concepts, novelty acts differently over time on the appeal that typicality may promote (Carbon, Hutzler & Minge 2006; Carbon & Leder 2005); attractiveness at first corresponds to the presence of familiar, typical concept attributes or properties, but then decreases when challenged by innovative, non-typical variations that ultimately succeed following repeated exposure. For brands, similarly, attractiveness can be apparent in a branded product that possesses both *'differentiation* [novelty] *and relevance* [appropriateness, or typicality]*'* (Batra, Lenk & Wedel 2006, p.4) to the brand category. Therefore, continuing attractiveness of many concepts result from the modification of properties, prototypes and category boundaries, such that both novelty *and* typicality could be represented as asymmetric 'novelty-typicality' forces within the concept's affective content (Figure 3). In well-established brands, it follows that attractiveness must be akin to given components of preference, commercial success and company longevity and therefore a consistent 'novelty-typicality' relationship should be implied from the affective content present in preceding representations of the brands products. Affective content trends, by their nature, can only be retrospectively established in the lineage of the brand. But if sufficient pattern exists within historical positions, it is conceivable that they may be 'forward-projected' to aid product and brand development. Therefore, it appears sensible, and perhaps necessary, that when designing and engineering new branded products that the model be explored to inform that process.

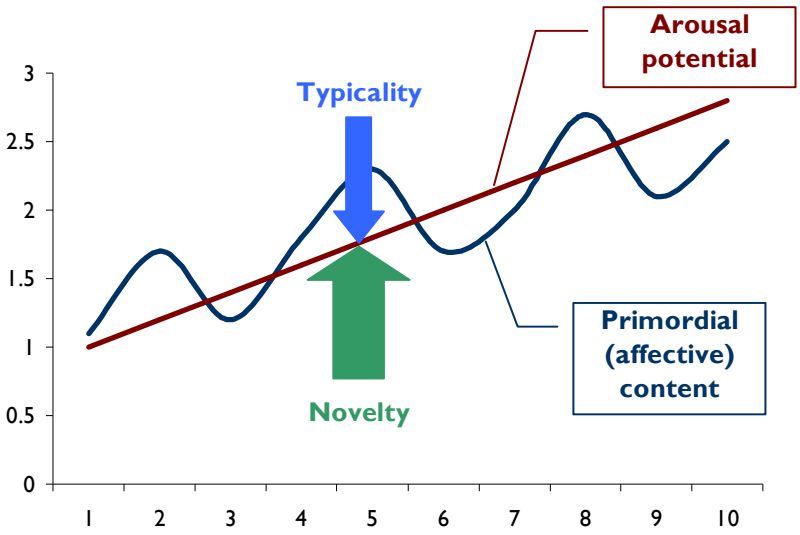

Figure 3. The novelty-typicality equilibrium acting on arousal potential (adapted from Martindale [1990]).

The study of affective content in an example brand

In preceding work a luxury automotive brand (named for the purposes of the paper, 'Luxori') was found to act as a cognitive category, and that assessments of a set of discreet product properties were highly influential in the categorisation process (Abbott, Shackleton & Holland 2008). However, the study only presented a 'snap-shot' of the brand's category structure and provided no insights into the evolutionary effects of affective content in its product's constituent properties. To explore the effect, in this study, the Luxori brand was examined for affective content evident in a lineage of former product examples.

Affective content analysis; methodology

Interest in brand characteristics mirroring the 'primordial content' cycle were satisfied by taking an alternative approach to previous techniques deployed (Martindale & Uemura 1983; Martindale 1986; Martindale 1990). Because these studies were not interested in analysing meaning or underlying property characteristics of the higher-order concept, they did not lead to the elaboration of the components of the overall concept that are important to this research. Therefore, a 'bottom-up', additive test was necessary. This test proceeded through three phases; firstly, an identification the

brand's component, lower-order, affective content within contemporary sources to the products studied; secondly, an analysis of affective content meanings to enable them to collapse into constructs of meaning; and thirdly, a calculation of affective content trends from the instantiation of the construct over time. Exploring the brand's affective content in this way provides insights into potential property manipulation and the possible future nature of overall affective content that are not revealed by previous 'top-down' methods. Further, this study also needed to address criticisms of previous research where historic opinions of products contemporary to the epoch are given from modern day views of those same products. Outcomes derived in this manner may be prone to influence by nostalgic judgments that may then elevate some fondly thought-of properties and de-emphasise others (Martin 1998). Further, 'attractive' qualities are difficult to distinguish relative to prevailing technological, cultural or social contexts that cannot be appreciated without far-reaching insight, if at all. Secondary sources are also liable to be inaccurate indicators of brand structures, being indiscriminate and in-exhaustive. Consequently, brand categorisation and affective content effects are likely to be inaccurate when viewed retrospectively and any subsequently anticipated directions accordingly miss-conceived. Therefore, the source information in this test needed to be primary and contemporary to the time point observed and consistent in information type to obtain fair and regular distributions of potential affective content.

Motoring road tests from published journals were identified as the most appropriate and salient primary sources of affective content in the Luxori brand's products. These offered a number of benefits to the test objectives, being independently written, elaborative (not solely concerned with objective specification), comparative to both preceding and alternative models and remarkably stable in their organization over many decades (most include sections on performance, handling, ride and exterior and interior features, for example). Original or re-printed articles were sourced from a variety of English language based motoring and general press publications, primarily from the United Kingdom, but also from the United States, Canada and Australia, including *The Autocar*, *The Motor*, *Road and Track* and *The Times*. The articles (A) describing Luxori products extracted from these publications equated A*n*=105 and were published between 1924 and 2007, with a spread per decade

(P) ranging from 1920's, A*n* = 3; 1930's, A*n* = 31. The first author examined each article for individual elaborative, emotive descriptors (typically adjectives [D]) as indicators of the 'primordial content' evident in writing reacting to specific interior features. In total D*n* = 221 unique descriptive instances in all 105 articles were identified. For example; 'enticing', 'convenient', 'imposing', 'flawless', 'generous', 'exquisite' etc., were extracted from passages such as;

> *'One has the impression of being enveloped in leather and lamb's wool, with walnut veneer to delight your eyes and everything possible for your comfort and convenience within your reach.'*
>
> Road & Track, November 1979 (descriptors extracted underlined)

Consideration was given to consistency of elaboration of concept meanings in the publications source countries as a possible bias in the assessment of affective content in the Luxori brand, but with reference to Osgood, May & Miron (1975), indicating concepts largely produce similar meaning factors across cultures, it was concluded that any cross-cultural variation would be minimal and insignificant to the overall objectives of the study.

In the preceding work (Abbott et. al. 2006), similar descriptors were analysed for meaning and allocated to general constructs to reduce synonyms to distinct facets of the overall meaning of the vehicle interior. Accordingly, the 221 unique descriptors in this test were collapsed into 23 constructs (C_1, C_2, C_3....C_{23}) (Table 1) by reference to the previous work, Wordnet 2.1 (http://wordnet.princeton.edu, a linguistics tool that identifies synonyms ranked by likeliness of instantiation within common English dialogue) and the authors judgement (for example; 'enticing' into PLEASURE / ATTRACTION, 'convenient' into PRACTICALITY, 'imposing' into POTENCY, 'flawless' into QUALITY / APPEAL, 'generous' into EXPRESSIVE, 'exquisite' into ELEGANT / REFINED).

The number of articles per period (P) considered for analysis was restricted to A*n* ≤ 5. The choice of articles was governed by the highest amount of overall affective content present in each period, such

that the top scoring articles were included. This had the effect that P produced a constant variable whilst maximising affective content quantity. Values were then represented firstly by individual constructs within-decade quantities and secondly as overall affective content averages in each period. Table 1 illustrates affective content for each of the 23 constructs between 1924 and 2007 that exhaust the concept of the Luxori interior and the overall affective content it assembles.

	Within-decade Affective Content								
	Descriptors per Decade								
	20's	**30's**	**40's**	**50's**	**60's**	**70's**	**80's**	**90's**	**00's**
C_1	0	2	0	4	3	0	9	3	1
C_2	0	1	0	1	0	1	0	3	2
C_3	0	10	3	9	7	3	7	1	7
C_4	1	7	3	2	4	6	6	3	5
C_5	4	7	2	9	9	8	6	6	16
C_6	2	5	2	5	1	1	12	0	5
C_7	1	14	7	9	10	7	14	5	6
C_8	4	0	1	2	2	1	4	0	12
C_9	1	0	0	2	0	0	2	3	2
C_{10}	0	2	1	0	1	0	3	0	6
C_{11}	0	0	0	0	1	0	2	0	0
C_{12}	0	0	1	2	3	3	8	4	3
C_{13}	0	0	1	0	0	1	2	0	1
C_{14}	1	18	2	4	7	4	13	3	13
C_{15}	2	2	6	2	1	0	3	3	3
C_{16}	0	3	0	2	4	7	6	5	4
C_{17}	1	0	0	0	0	0	0	0	0
C_{18}	0	0	0	1	0	0	0	0	0
C_{19}	2	3	0	1	0	0	1	1	0
C_{20}	1	4	1	3	5	0	5	2	8
C_{21}	1	3	0	1	0	0	0	0	3
C_{22}	2	5	3	4	3	3	7	0	7
C_{23}	2	2	0	1	0	0	2	0	0
Affective Content per Decade mean	1.09	3.83	1.43	2.78	2.65	1.96	4.87	1.83	4.52
Upper Confidence Interval	1.50	5.45	2.10	3.75	3.71	2.87	6.32	2.50	6.05
Lower Confidence Interval	0.67	2.20	0.77	1.81	1.59	1.04	3.42	1.15	2.99

Table 1. The Luxori interior, with individual constructs (C_1, C_2, C_3....C_{23}) affective content and overall average affective content quantity, by decade.

Construct affective content and trends

Construct trends can be represented by smoothed line plots of the variability in the quantity of affective content (Martindale 1990). In the Luxori interior, 21 of the 23 constructs demonstrate a sine-curve type oscillating trace that corresponds, generally, to findings of 'primordial content' in other created concepts. For example, construct C_{10} [ELEGANT / REFINED] (D = 'beautiful'; 'exquisite'; 'tasteful', for example) exhibits peak affective content in P = 1930's; 1960's; 1980's; 2000's (Affective content quantity = 2; 1; 3 & 6 respectively), and no affective content in P = 1920's; 1950's; 1970's; 1990's (Figure 5). The affective content cadence is frequent and increasing leaving a best-fitting quadratic polynominal trend-line ($R^2 = 0.606$) that inclines sharply in recent periods.

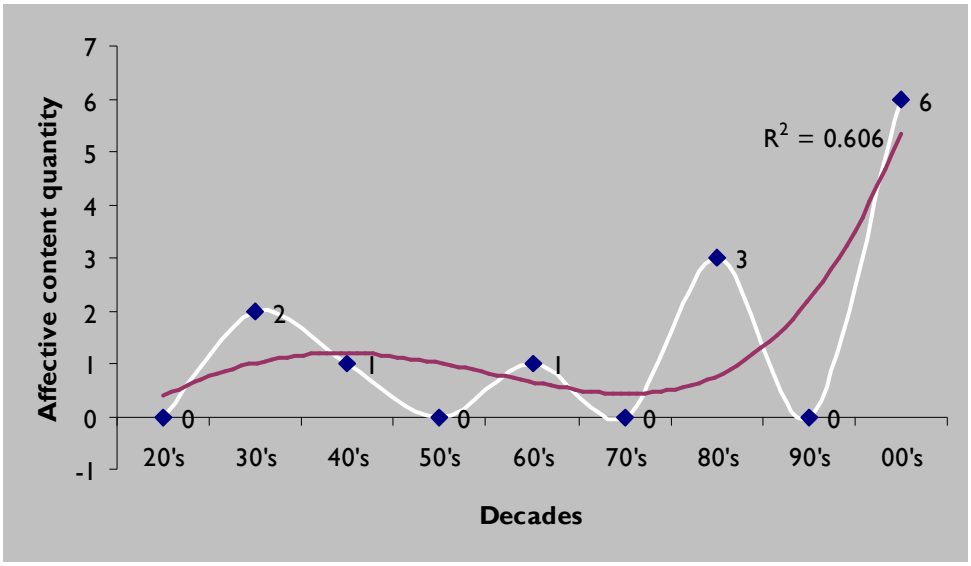

Figure 5. Luxori interior construct C_{10} [ELEGANT / REFINED] affective content curve and affective content trend. Variability is statistically significant ($p = 0.004$).

Similarly, construct C_5 [QUALITY / APPEAL] (D = 'faultless'; 'good'; 'high quality'; 'ideal'; 'perfect', for example) affective content peak values are high with two distinct troughs in P = 1940's & 1980's/ 1990's (Affective content quantity = 2; 6; 6 respectively) (Figure 6). The affective content cadence is lower than C_{10} [ELEGANT / REFINED] but is increasing, leaving a best-fitting quadratic polynominal trend-line ($R^2 = 0.7651$) that also inclines sharply in recent periods.

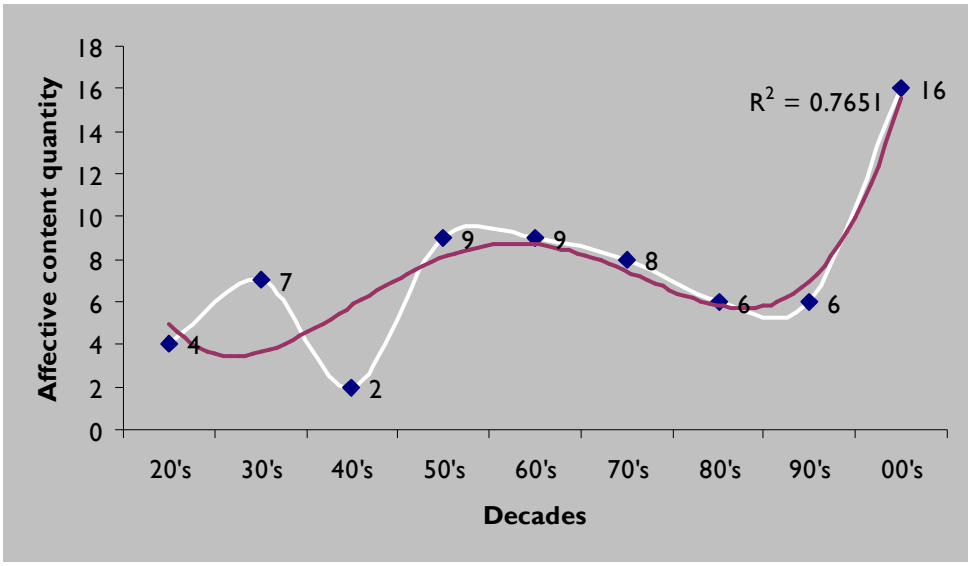

Figure 6. Luxori interior construct C_5 [QUALITY / APPEAL] affective content curve and affective content trend. Variability is statistically significant (p = 0.033).

Similar cyclical patterns are evident in all constructs except C_{17} [EXCLUSIVE] and C_{18} [NATURAL], which are not congruent to the theory within the literature studied. Both of these produce a single 'peak' (P = 1920's & 1950's respectively) and zero values in other periods. Jointly, these constructs were considered not to disprove the general characteristics demonstrated, but that either unknown contextual influence was present, or that insufficient D examples were evident within the literature. To test against the null-hypothesis that affective content for individual constructs could be constant, a chi-square distribution test was performed that concluded that at least half of the constructs do produce cyclical traces of statistically significant variability (p<0.05). Lack of reliability for the remaining constructs could be due to the level at which the construct is assembled; further reduction into similar constructs enlarges both the sample size and modifies variability. For example, from the literature studied there appeared to be discrimination between 'good', or 'must-be' quality (construct C_5; QUALITY / APPEAL) and 'excellent' or 'attractive' quality (construct C_{22}; EXCELENCE; D = 'exceptional'; 'fabulous'; 'superior'; 'unmatched', for example). Whilst the former exhibited statistically significant variability as a separate construct, the latter did not. However, combined into one construct of overall 'quality', variability becomes highly statistically significant (p = 0.0063).

Overall affective content

The methodology employed identifies affective content values for attributes or properties that construct the overall concept of the interior of the Luxori brand's products. Two-fold benefits of individual property valuation derive from the provision of insights into lower-order property conditions and evolutionary trends, and the facilitation of the construction of affective content present in the higher-order concept from them. Despite this, although traces conforming to the theory are generally evident, not all constructs produce ascending trend-lines; a number are clearly declining (eg: C_{19}; C_{23}), nor do peak and trough variability or frequency coincide (see Figure 7). Combining construct cycles and averaging, provides a compound effect that produces a single curve for the overall concept that itself corresponds to the cyclical nature of 'primordial content' in other concepts texts; Figure 8 illustrates the arithmetic average of overall affective content for the 23 constructs that exhaust the Luxori brand's interior, with upper and lower confidence intervals (Hayes 1998) for each period.

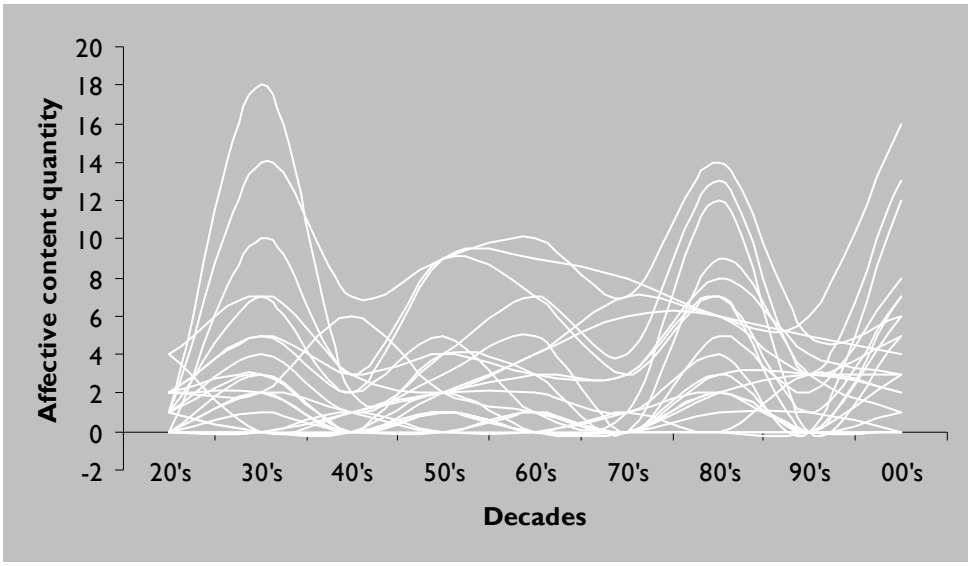

Figure 7. Luxori brand interior 23 affective content constructs.

Previous research observed that a condition of peak and trough 'primordial' content would be co-incidental indicators that artistic styles were forced to significantly change through limits in the attractiveness of the preceding style (Martindale & Uemura 1983; Martindale 1986; Martindale 1990).

Therefore, with a branded product, affective content shift should be apparent at, or near to, the point at which significant new product examples are launched to offset declining popularity (sales) in prior models, due to factors like ubiquity, changing markets or outdated technologies. Figure 8 also illustrates major new product activity for the Luxori brand (Models A – G) overlaid to the affective content cycle. Because data points were plotted at mid-period intervals (in this case, mid-decade) a peak value would be evident at the modal point in the period, which in some cases does not exactly correspond to new product launch dates. Even so, it is clear that changes in overall affective content for the Luxori brand have occurred at, or near to, the introduction of new product examples, as expected by the model.

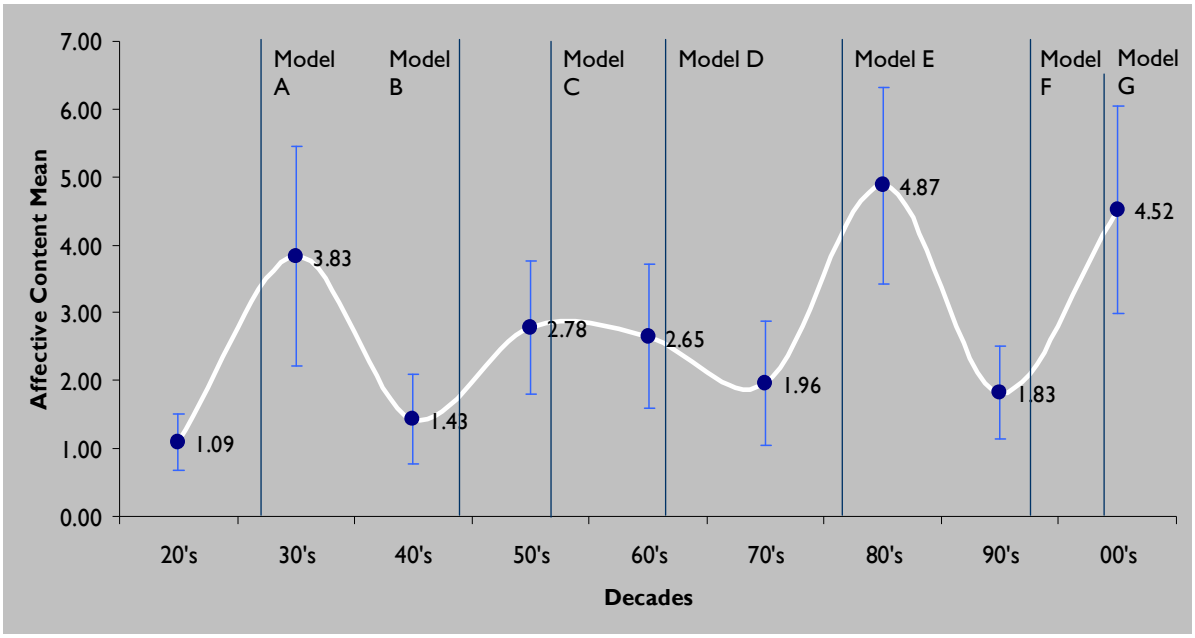

Figure 8. Overall mean affective content for the Luxori interior, overlaid against major product launches. Variability is highly statistically significant (p = <0.0001).

Discussion

The study of affective content in motoring journals for the Luxori brand establishes at least two important principles for brand and product management. Firstly, patterns of affective content for specific constructs, and overall values (for this brand, within the literature available), generally appear to oscillate in a similar manner to comparable content found elsewhere in other texts describing other created concepts; the quantity of affective content in the expression of a construct, in relationship to

other constructs and over time, rises and falls with some regularity. According to the established theoretical model, the point of change in quantity of overall affective content within the Luxori brand is evident around major product launches. A given condition of this change-point is the modification of a brand-category representation by the need to develop novel attributes or properties in the new product, *balanced by* typical properties to the brand-category, thereby stimulating attractiveness. This condition appears to be reflected in the journalists cognitive output moving specific constructs of the Luxori brand forward in the cycle of increasing / decreasing affective content expressed. Therefore, it is considered that the brand, in this case, conforms to the laws defined by this model in a similar manner to other artistic fields.

Secondly, the fact that such trends can be traced gives a potentially important insight into the cognitive condition of the brand, its representations and category characteristics. Deductions may be made about the current and historical relationship between product properties (stimulatory inputs) and affective responses (associative outputs) within technological, social, cultural and, potentially, commercial contexts. For example, declining constructs can be identified and pro-actively revived, if appropriate, and inclining constructs supported or emphasised within product and brand development activities. Further, if the affective content model continues to be true for the brand, its representation will be predictable, indicating future construct conditions that should be influenced by the manipulation of specific attributes or properties within the product development process for product attractiveness and brand-categorisation benefit.

Affective content trend development

The theoretical model, as discussed, indicates that affective content trends, at least for the higher-order concept, will monotically increase over long periods. This is the case for the overall affective content found in the interior representations of the Luxori brand. The model also expects that when affective content trends demonstrate a sharp incline, or sharp decline, stylistic change is immanent, in order that the balance of novelty and typicality contained within the concept be kept in check. However, the methodology employed requires that if the higher-order increases, as a sum of affective

content in lower-order constructs, then the trend lines for lower-order constructs should also generally increase, given approximately similar weighting. Therefore, attention to the characteristics of affective content trends for the underlying constructs of the Luxori brand reveal important information on possible future conditions that may be anticipated or pro-actively encouraged through property manipulation. For example, the construct C_8 [INTRICACY / DETAILING] (D = 'delicate'; 'intricate'; 'thorough', for example) (Figure 9) has sharply increased recently, suggesting that if the pattern is predictable, a content change that de-emphasises this construct may be imminent. Through analysis of the 23 construct trends, C_3; C_5; C_8; C_{10}; C_{20} and C_{22} are likely to witness future change from ascending to declining affective content, whilst C_1; C_2; C_4; C_6; C_7; C_9; C_{11}; C_{12}; C_{13}; C_{14}; C_{15}; C_{16}; C_{19} and C_{23} are likely to reverse from declining to ascending affective content. Constructs C_{17} and C_{18} are inconclusive due to their singular data points in the periods studied, as discussed above, which do not allow trends to be drawn. The compound effect suggests continuing ascending affective content for the Luxori brand in P = 2010's, supported by the observation that peak affective content in P = 2000's (mean affective content quantity = 4.52) is not yet higher than the previous peak in P = 1980's (mean affective content quantity = 4.87), which might be expected. Therefore, the model for interior representations of the Luxori brand does not anticipate immanent major stylistic change. These assessments tend to be qualitative predictions from historical positions and patterns rather than quantitative extrapolations that, as discussed, are difficult to describe within contemporary technological, cultural or social contexts. Nevertheless, qualitative interpretation of 'primordial content' within previous research correlated with quantitative methods (Martindale 1990) suggesting that such conclusions are reasonable.

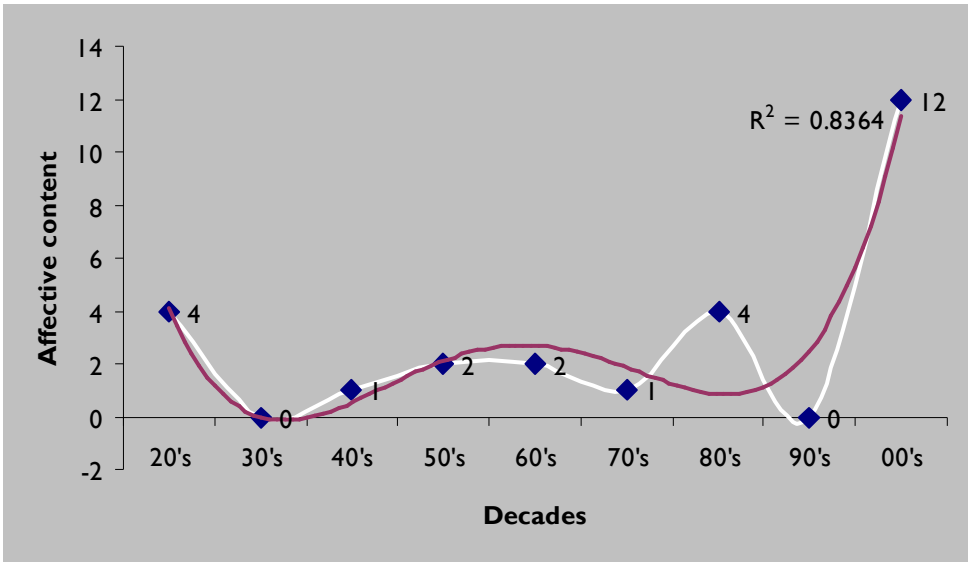

Figure 9. Luxori interior construct C_8 [INTRICACY / DETAILING] affective content curve and affective content trend. Variability is highly statistically significant (p = <0.0001).

Summary and conclusions

Successful products in mature market segments are increasingly characterised by non-utilitarian attributes relating to cognitive mechanisms of attraction and meaningfulness. Both attraction and meaningfulness are multi-componential and include novelty and typicality elements that stimulate arousal. In long established created concept fields like art, poetry and architecture the novelty-typicality relationship in arousal has been explored in terms of the 'primordial content' of the style. This has been shown to exhibit characteristics that are consistent and repeatable; an oscillating trace that cyclically changes direction at the point of peak primordial, or affective, content. The point of change co-insides with major changes in artistic style due to peak 'primordial content' being excessive and therefore unattractive. This paper demonstrates that similar characteristics can also be observed in the created concept of a branded product, through the analysis of the properties of the interiors of a high-luxury automotive brand. By identifying component constructs in the language of texts of elaborative, independently written literature, contemporary to the regular time periods under study, and extracting their attributed affective content quantities within those periods, evolutionary cyclical traces are apparent that mirror principles established in texts elsewhere. By examination according to the theory, trends can be identified that indicate immanent changes in construct

instantiation. Further, by constructing the overall affective content for the higher-order concept from compound constructs, the patterns re-emerge with points of change in affective content corresponding to major new product launches.

By understanding the affective content characteristics of properties of an established branded product in this manner, information can be collected about the nature and condition of the brand within the collective cognitive consciousness. Two benefits can then be imagined and possibly exploited; firstly, future branded product offerings may be assessed for likely attractiveness, according to the natural predicted cycle, confirming appropriate novelty-typicality relationships are contained within the product's attributes and that brand-categorisation effects are compliant. Secondly, property manipulation opportunities arise that may be useful in supporting or emphasising specific properties to correct or redirect brand or branded product strategies that, in turn, may maximise attractiveness or brand-categorisation. In such cases, this paper introduces an informative technique to product and brand management activities concerned with the cognitive processing of concepts and the related development of attractive branded products.

Managerial Implications

There are many tools and techniques that can inform the product or brand manager of consumers' opinions on the attractiveness of a product and how meaningful the product is against the brand's values. However, this information tends to be a 'snap-shot' of opinion and is often only accurately obtainable late in the product development process. This can lead to major cost or time penalties if changes to the product are necessary. Two implications arise from the model discussed in this paper; firstly, the pattern of 'affective content' within a branded product may be predictable; and secondly, that product sub-attributes, and their status, can be identified. Both of these elements are valuable sources of information about potential product attractiveness to the consumer. They may inform the design and engineering process by identifying the attributes of the product that need to be emphasised or de-emphasised in order that the product may be well received. Consequently, product development cost and time benefits may be realised through fewer modification 'loops' by promoting designs that

are more accurately good *and* right for the brand. Further, the model may facilitate assessments of new product proposals against anticipated consumer reception, at a much earlier stage within the development process, aiding concept selection.

The condition of the brand held by consumers and the point at which, for them, product novelty declines, is often complex, intangible and difficult to establish. Planning new product development activities within this context can, therefore, be highly judgemental and somewhat inaccurate. The model discussed makes the current, and possibly the future, cognitive condition of the brand clearer. Accordingly, product and brand managers may find this information useful in positioning or manipulating new product cycle plans that align with potential changes in consumer opinion, or in informing brand supporting activities, where the attributes of the product are discussed, like launch advertising, press messages and retail promotions.

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