

Measuring Brand Associations for Museums and Galleries using Repertory Grid Analysis

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Introduction

One of the undisputed achievements of marketing has been the extent to which brands have become an indelible part of the landscape of consumption. Both in marketing literature and marketing practice, brands play a key role in organising the activities of the marketplace. This achievement originated in the consumer goods area but has now moved into services. Our goal in this paper is two-fold: first, to support the application of the concept of branding in the realm of cultural institutions such as museums and galleries; second, to investigate empirically the brand associations of some prominent London museums. Within the eleven museums and galleries chosen for this study, the Tate Museum was given particular attention.

Museums and galleries have increasingly come under pressure to act as businesses (McLean 1997, Kotler 1998). For example, following the path of the Metropolitan Museum of Art in New York, the British Museum in London has recently appointed a Managing Director alongside the existing director. The new 'manager' is responsible for the financial operations of the institution. Funding bodies increasingly scrutinise museums to see if they are delivering 'value to the customer.' Museums rely on visitors. But how do visitors choose museums? There can be no simple answer to this question. The interests, tastes and motives of museum visitors would make a lengthy list. The approach which we use to unlock a part of the visitor decision process comes from the marketing analysis of branded goods. By understanding the associations which consumers have developed concerning various brands, marketers claim a better understanding of the brand equity embedded in their brand names. Hence our goal is to make explicit the associations (attitudes, impressions, dispositions, or mental constructs) which have grown up around and become attached to some important London museums.

Literature review

The literature concerning consumers' cognitive associations has covered aspects of both product associations and company associations (Keller 1993; Aaker 1996; Brown and Dacin 1997). In this regard, museums must initially be considered as being the locus of both product and company associations. The question of museum franchising (Caldwell 1997) is not yet relevant to many museums. Therefore, the associations which visitors have developed belong both to the museum as a brand name and to the experience of visiting the collections housed in a specific place (or website). There is general agreement that positive associations can be both a strategic asset (Weigelt and Camerer 1988) and a source of sustainable competitive advantage (Barich and Kotler 1981).

The term 'brand equity' is used to summarise all of the various assets which are part of a brand. Among the assets of a consumer product manufacturer are the brand names in its portfolio. Following Aaker (1991, 1996), the value which is built and embedded in the brand name consists of the following features: brand loyalty, awareness, perceived quality, associations and other proprietary assets. The value of having a brand name confers certain advantages on the owners of the brand: loyal customers will repeatedly

prefer your product/service because branded goods have a reputation for quality. When considering museums as brands we would modify Aaker's list by placing the 'collections as proprietary assets' first, and modifying the notion of brand loyalty to address the particular type of brands which museums now represent. Associations, however, remain the same. They are the cognitive structures which are used to frame an individuals' decisions; these are the focus of our empirical research program outlined below. While we wanted to map the associations which visitors have for museums and galleries in general, we thought it also useful to focus on one particular institution, the Tate Gallery. The purpose was to understand its specific brand associations. This aspect of the 'Tate' as a brand is important and particularly interesting insofar as the Tate has been engaged in museum franchising (there are two branches outside London, one in Liverpool and the other in St Ives, Cornwall) and is responsible for a major new museum franchise in London. The success of the brand, both in the original and the franchised versions, depends on understanding and correctly analysing the associations which exist as part of the visitors' cognitive construct. If the associations need to be modified and updated, then the first step in any communication campaign must begin with an understanding of the current status of existing associations.

The Repertory Grid method allows consumers to express their own personal constructs of the environment with a minimum of interviewer bias. The study is exploratory in nature and differs from the existing type of visitor satisfaction surveys insofar as it does not provide categories or rating scales. The hypothesis is that the method will elicit cognitive constructs that are relevant to the consumer's personal image of the institutions (brands).

Personal construct theory and repertory grid analysis

In order to appreciate the potential utility and full benefits of the repertory grid method in the field of product and service branding, it is relevant to review briefly the theory upon which the method is based. Repertory Grid Analysis (RGA) is the operationalization of George Kelly's psychological Theory of Personal Constructs (Kelly 1955, 1966). The essential building blocks of the Theory of Personal Constructs and RGA are individuals' personal interpretations and assessments of the 'environment' around them and with which they interact. This 'environment' could involve people, places or objects or an amalgam of all three. The individual's personal interpretations are called constructs. Kelly argued that individuals act as proto-scientists to the extent that they develop modifiable expectations of the surrounding environment. Such expectations are based on a set of theories about the manner in which the environment is structured. The individual's expectations are tested via behavior and modified accordingly. In the context of the present study the brand associations which visitors have formed constitute a set of expectations about a particular museum. It might be anticipated that once consumers experience a particular museum or gallery, their levels of satisfaction will depend upon previously held expectations, these in turn will be modified by the reality of the consumption experience.

Essentially, Kelly argued that an individual's expectations represent his/her personal constructs which are used to evaluate particular phenomena. Kelly also argued that individuals' personal constructs are bipolar in nature and finite in number. Each construct has a contrast associated with it. For example, a consumer could apply the

construct "displays Victorian art" and the contrast "only displays modern art" as a means of discriminating between galleries. Each construct-contrast pair forms one basic dimension of a person's cognitive appraisal of the environment. Finally, the construct-contrast pairs are not simply polar or semantic opposites. Rather, their structure reflects how individuals, in this case museum visitors, view the world of museums and galleries.

Applying a Repertory Grid

This section describes the results of a survey that used RGA to elicit consumers' associations of an important group of London's museums and art galleries. In order to understand how repertory grids are applied and analyzed, Figure 1 presents a grid that was elicited from one of the survey respondents. At the top of this grid are found the names of the eleven London museums and art galleries that constituted the study objects. These institutions are called the elements of the repertory grid.

The first step in administering a repertory grid to a respondent is to present him/her with the names of three of the study objects or elements, typically written on cards. These three elements constitute a triad and in the language of RGA, we are establishing construct-contrast pairs via the triad method. The members of this first and subsequent triads that are presented to the interviewee are usually determined by the researcher before administration of the grids to respondents. For recording purposes, the members of each triad are represented by circles in each row of the grid. For example, in the first row of Figure 1, the first triad that was presented to the respondent comprised element number 1 the British Museum, element 5 the Tate Gallery and element 11 the Science Museum. The respondent is now asked to consider the presented triad and to state one way in which any two of the elements of the triad are similar yet dissimilar from the third member. Which pair of the available triad members is considered to be similar is the respondent's choice.

Again for recording purposes, the ticks inside the associated circles of the first row of Figure 1 indicate that 1 the British Museum and 11 the Science Museum are the triad members deemed to be similar by the respondent. This pair of elements is regarded as different from the third triad member, 5 the Tate Gallery, whose circle remains blank as a consequence. Under the heading 'Construct' in the first row of Figure 1, 1 the British Museum and 11 the Science Museum are considered to be similar because in the opinion of the respondent, they are "more general". As recorded under the heading 'Contrast' in row 1 of this grid, 5 the Tate Gallery is considered to be different from the aforementioned pair of study objects because the respondent regards the Tate as being "specific to art". The interviewee is now asked to consider in turn the eight museums and galleries that were not members of the first presented triad. He was asked to specify which (if any) of these eight institutions also possesses the property defined by the construct. The (non-triad) institutions that are also deemed to be "more general" are ticked in row 1 of the grid and those perceived not to possess this characteristic are left blank. Examination of the first row of Figure 1 shows that our respondent feels that 2 the Victoria and Albert, 7 the Museum of London, 8 the Imperial War Museum, 9 the Transport Museum and 10 the National History Museum are also "more general" institutions. Conversely, the pattern of blanks in this row means that 3 the Sir John Soane's Museum, 4 the National Gallery and 6 the Hayward Gallery do not possess this characteristic in the mind of our interviewee. This completes the derivation of the first construct-contrast pair.

This process is repeated to establish further construct-contrast pairs. For example in the second row of Figure 1, the presented triad consisted of 2 the Victoria and Albert, 5 the Tate gallery and 8 the Imperial War Museum. As shown by the ticks, the respondent feels that the former two triad members are similar in that they are "traditional", which becomes the construct in row 2 of this grid; 8 the Imperial War Museum differs from these fellow triad members because it is a "negative place". Turning to the non-triad members in row 2 of this repertory grid, the respondent believes that 1 the British Museum, 4 the National Gallery, 7 the Museum of London, 10 the National History Museum and 11 the Science Museum are also "traditional". The museums and galleries that are not ticked in row 2 of the grid are deemed not to possess this characteristic. The respondent whose repertory grid is presented in Figure 1 was able to articulate sixteen construct-contrast pairs, before the interview was terminated.

There are a few points that should be made about the application of repertory grids to respondents in marketing surveys. Firstly, unless there is a particular research objective involving special focus upon one or more study objects, then triad membership is determined randomly by the researcher. However, if one of the study objects is a major study focus, then it does not illegitimise the repertory grid method for that element to appear as a triad member more often than would be the case by chance. For example, commissioners of the repertory grid method may wish there to be a specific focus on customers' images of their own organisation. In our research we created a special focus on the Tate gallery. Secondly, triad members are usually presented to respondents by having the names written on cards. There would be the potential to use photographs as an alternative way of presenting triad members, for example, in the evaluation of the characteristics of study objects that are presently unknown to the consumer. This could relate to the testing of proposed product or service innovations. Thirdly, it is expected that some respondents will produce few construct-contrast pairs. Their expectations concerning a product may have a simple structure, for example, a person may construe our museums as simply "exhibiting art" versus "not exhibiting art". Other respondents may have a large repertory of personal constructs reflecting a variety of expectations and requirements of products and services.

Lastly, it can be seen in Figure 1 that the construct and contrast are not necessarily grammatical opposites. These are the words of the interviewee and reflect that individual's way of construing the world of museums and galleries. In typical image studies respondents are given semantic differential rating scales where the dimensions are chosen by the researcher. However, individuals do not necessarily construe their environment by means of opposites. Neither do repertory grids impose constructs on the respondents as do other techniques such as the Likert and Staple scales. Imposed constructs may not possess actual relevance to that attitudes of the interviewee. Further, there is no need for a construct to be factually correct. Consumers' decision making behaviour depends on their constructions and perceptions of products and services rather than on verifiable characteristics.

Analysis of Repertory Grids

Personal constructs tend not to exist in isolation but are more frequently associated with other constructs that reflect a similar meaning. Individuals' constructs are not a

chaotic jumble, but are linked to form what is often quite a complex system. Clusters or linkages of constructs are required to attach meaning to the 'environment' for the individual encountering it (Honikman 1976). A construct subsystem is defined as a collection or grouping of personal constructs within which strong inter-relationships exist. The methods that are applied to the analysis of repertory grids are based on the objective of deriving meaningful construct subsystems. The notion of personal constructs being grouped into a series of construct subsystems suggests that repertory grids are tailor made for examination by principle components analysis. There are typically few links between one construct subsystem and another. For example, a particular museum visitor might possess one construct subsystem made up of constructs that reflect 'the breadth of exhibits'; his/her second construct subsystem may be made up of constructs reflecting 'interest for children' and a third could involve constructs reflecting 'location relative to available transport'.

Using RGA terminology, all of the ticks in Figure 1 are referred to as incidents and all of the blanks as voids. To prepare a repertory grid for principle components analysis, the incidents (ticks) related to each construct are coded for data entry as "1's" and the voids (blanks) as "0's". The logic of principle components analysis of such binary responses in repertory grids is that similar or identical patterns of incidents and voids between the various constructs in the grid would suggest that such constructs are correlated or linked. They could be grouped into a construct subsystem. For example, in Figure 1, the patterns of incidents (ticks) and voids (blanks) for the first, fifth and fourteenth constructs are identical. These three constructs are perfectly, positively correlated with each other. The pattern of incidents and voids for the fourth and sixth constructs is the exact reverse of the pattern observed for the first, fifth and fourteenth constructs. All five of these constructs are therefore mutually and strongly correlated, either in a positive or negative sense. These five highly inter-dependent constructs are combined to form one component by which this respondent perceives London's museums and galleries. Examination of the associated words and phrases used by the interviewee in his articulation of these five constructs and contrasts in Figure 1 suggests that the aforementioned component or construct subsystem might be subjectively labelled as 'museums exhibiting general history as opposed to art'. Given the binary nature of data elicited from repertory grids, Kelly (1955) devised a method of analyzing them by principle components that is nonparametric in nature i.e. it makes minimal statistical assumptions about the properties of the gathered data. However, research in a variety of contexts has shown that the more widely and conventionally used parametric form of principle components analysis virtually always yields the same components or construct subsystems when applied to such binary data (Coshall 1991).

The survey application of repertory grids

Fifteen students on the Master of Arts in Marketing course at the University of North London had been tutored in RGA as part of their Market Research module. Repertory grid interviews were conducted with visitors (on a pre-determined Wednesday in March 1999) to the eleven museums and galleries that constitute the elements in Figure 1. One student was allocated to each of these institutions. The remaining four students were asked to conduct interviews at the Tate gallery. Each student was asked to complete ten repertory grid interviews on the day in question, which could generate 150 completed grids. Selection of respondents could not be on the basis of any

probability sampling method, but rather on the basis of convenience. Respondents were intercepted on their way into the museums.

The pattern of triad members in Figure 1 was used in all grids presented to respondents. Triad membership was not selected randomly; rather, given the study emphasis on the Tate gallery, this institution was included in triads more often than would be the case by chance. Interviewers were asked to terminate application of the grid if the respondent repeated the same construct/contrast pair three times. Otherwise, a respondent could supply up to twenty construct/contrast pairs.

Of the 150 repertory grids, six were lost because the interviewee had to leave before the grid was completed. The remaining 144 grids were subjected to parametric principle components analysis with a varimax rotation. The sample size of 144 represents the largest repertory grid analysis to date. After examination of the components obtained, a further five repertory grids were eliminated from the study because the associated components appeared to be spurious. This is a very reasonable attrition rate for a technique like principle components analysis which is based on the significance of correlations. Hence, 139 grids remain and for which the results are reported below. For the purpose of grouping responses, after completion of each repertory grid each respondent's sex was recorded along with their place of origin and their age.

Principle components: analysis of the Repertory Grids

Parametric principle components analysis of the 139 repertory grids generated a total of 583 components. The number of generated components per respondent is shown in Table 1. There is a mean of 4.19 components per respondent with a standard deviation of 1.24. The median is 4 components per respondent. Many of the derived 583 components are common across individuals (usually reflected by the same words and phrases used in elicitation of the constructs/contrasts) or they possess strong, unifying themes. For example, 61 (43.9%) of the 139 respondents produced a component that possessed the common theme of 'exhibits art/paintings', 44 (31.7%) of a sample generated a component reflecting 'to do with history' and 28 (20.1%) produced a component reflecting museums and galleries that are 'interesting'. By grouping together components that possess common language and themes, the original 583 components are reduced to a more manageable 92 components. These 92 components are presented in the Appendix to this article, along with their frequencies of occurrence among the sample respondents. During this grouping exercise, it was apparent that some components are unique to particular individuals. There are 15 components at the end of Appendix 1 that were obtained just once. Uniqueness in terms of some dimensions of peoples' constructions of the environment was anticipated in Kelly's (1955) individuality corollary. (Much of his Theory of Personal Constructs is presented in the form of corollaries).

These are the most commonly shared mental constructs and they tell us that visitors' decisions are guided by many factors that are intuitively obvious such as 'Exhibits art (or paintings),' or 'To do with history.' The other dominant components in this primary group include 'Interesting,' 'Educational' and the inevitable 'Place to take school children'. These results are not surprising and in fact give some measure of reassurance that the components our research has identified are not spurious. It is worth noting is that 'Interactive' is the 39th component and is mentioned by 2.9% of

respondents. The current climate of museum design has placed great emphasis on replacing traditional exhibits with visitor interactives. The redesigned galleries of the Museum of Natural History in New York and of the Royal Greenwich Observatory in London offer evidence of this practice. At this point in time our research indicates that 'Interactives' is not a component which weighs heavily with many visitors.

Further down the list is component 58 'Imposes entry charges.' This was a component for only three of the 139 respondents. A related component 70 'Cheap day out' had a frequency of two. Such results have implications for the museum funding debate which occupies a place on the national agenda of the United Kingdom. Our findings suggest that these are not strong components. The broad variation of the components which were identified means that cost was a matter of concern for a very small number of visitors. The more significant components discussed earlier are those which identify the nature of the collections or exhibits.

The extracted components or construct subsystems may be analyzed, firstly, in terms of their frequency of occurrence and, secondly, in terms of differences in their use between various consumer groups. The average number of components derived from the repertory grids is not significantly different between the sexes, people's places of origin or over the various age groups. However, there is significant variability in the numbers of components obtained across just the age groups (Levene statistic = 3.949, $df_1 = 5$, $df_2 = 133$, $p = 0.005$). (Only one interviewed museum visitor was aged over 65 years, so the two most elderly groups had to be combined before conducting Levene's test of homogeneity of variance). Examination of the standard deviations (and indeed ranges) of the numbers of components obtained for each age group shows less variability as age increases. More elderly visitors tend to be more consistent in the numbers of components by which they construe the presented museums and galleries. Conversely, younger museum visitors employ a more variable number of components by which they construe this environment. Therefore, although there is not a significant difference in the average number of components obtained across the age groups, there is less variation in this number with age. This may reflect well-tested, reliable dimensions of construction gained from more extensive previous experience of London's museums and art galleries. It is unexpected that there are not significant differences either in the average number or in the variability of the number of components obtained in respect of respondents' places of origin. The breadth of people's constructions of the institutions in this study is essentially the same for U.K. and overseas visitors.

The first nine, most commonly derived components in the Appendix have sufficiently large frequencies to permit analysis of differences across consumer groups. There is a significant difference between the proportions of pre- and post-35 year visitors for whom 'Interesting' (Component 3 in the Appendix) is a dimension of their constructions of the museum/art gallery environment ($z = 2.66$, $p = .008$). A component pertaining to 'Interest' is present in the repertory grids of 14.3% (14 out of 98) of the pre-35 year visitors, but in 34.1% (14 out of 41) of the grids of the post-35 year olds. Also, there is a significant difference between these two age groups in respect of possession of the second component in the Appendix, 'To do with history' ($z = 2.39$, $p = .017$). This component is present in 37.8% (37 out of 98) of the grids of the pre-35 year old visitors but in only 17.1% (7 out of 41) of the grids of the post-35 year olds. Hence, a significantly greater proportion of the middle aged and elderly

visit institutions for interest, but the nature of the exhibits (certainly in terms of 'History') is far less relevant. The remaining components in the Appendix appear in essentially similar proportions in the grids of the pre- and post-35 year age groups. Therefore, a wide variety of factors define what makes an 'Interesting' art gallery or museum for the middle aged and more elderly visitor. Conversely, 'Interest' per se is not a major factor in the images of younger visitors: a wide variety of components define their constructions of the environment. No statistically significant differences in constructions are found in relation to either the visitor's sex or place of origin. In essence, the repertory grid method evidences no significant differences in either the breadth or the subject matter of cognitive images held by males/females and by U.K./overseas visitors to London's museums and art galleries. Sex and place of origin are not determinants of consumer attitudes towards these London institutions; age differences are at best a marginal influence.

The case of the Tate gallery

The derivation of principle components scores is an integral aspect of principle components analysis (Manly 1986). In the present study, component scores essentially reflect the importance of derived components of each visitor's image of the individual museums and galleries. Here, focus is upon the principle components scores obtained for the Tate Gallery. (Anderson-Rubin scores are used. They have zero mean and unit variance). A positive score would imply that the Tate possesses the characteristic defined by the associated component in the opinion of the individual concerned; a negative score implies that the Tate lacks that particular characteristic.

Amongst the most frequently derived components in the Appendix, it is unsurprising that universally positive and relatively large scores for the components 'Exhibits art/paintings' (Component 1 in the Appendix; mean component score 1.45, standard deviation .43) and '(Art) gallery' (Component 4; mean 1.30, SD 0.59) are associated with the Tate. The Tate is generally not construed as being a 'Museum' (Component 5, mean -0.80, SD 0.63) and it is deemed not 'To do with history' (Component 2; mean -0.27, SD 0.75). Overall, the Tate is perceived as a gallery that exhibits 'Modern art' (Component 9; mean 0.77, SD 0.86). Although the absolute mean values of these scores is not large, there is a consistent suggestion that these components represent the Tate being construed according to its functional form. In other words, the strongest brand association for the Tate has to do with its functional characteristics - a modern art gallery.

More importantly in the context of branding, the Tate does not obtain consistently high scores on the more affective and commonly derived components in the Appendix. The Tate is generally construed as being only moderately 'Enjoyable' (Component 8; mean component score 0.62, SD 0.68) and 'Interesting' (Component 3; mean 0.39, SD 0.95) and even less of a 'Tourist attraction' (Component 16; mean 0.27, SD 0.95). Further, it is generally regarded as not being 'Educational' (Component 7; mean -0.09, SD 0.86), nor does it display 'Old exhibits' (Component 11; mean -0.08, SD 0.67). More pointedly, the Tate is generally construed as not being a 'Place to take (school) children' (Component 10; mean -0.44 SD 1.11) and its exhibits are not 'Diverse' (Component 13; mean -0.12, SD 1.25). The brand extension which the Tate is supervising in London has therefore a very delicate task.

Relatively large, positive scores are usually associated with the more idiosyncratic components towards the end of the Appendix. These latter components are part of few respondents' images of London's museums and galleries, yet they tend to distinguish the Tate favorably. The fact remains that the Tate was not consistently differentiated on component scores and had no overwhelmingly strong associations. The functional benefits of the brand are all that visitors have formed as mental constructs.

Conclusions

There are several implications which have been suggested by this research. The first concerns the method itself. We have argued that Repertory Grid Analysis is particularly suited to measuring the strength of the image or associations of cultural institutions. This is a new application of the method. There can be little doubting the richness and variety of the constructs obtained. Further, RGA does not impose constructs on respondents in the manner of rating scale methods that are more conventionally applied in consumer image studies. The repertory grid method permits consumers to define their own personal constructions of the environment at hand. As a consequence, RGA is more likely to extract cognitive images that are relevant to the consumer and congruent with ensuing choice behavior.

A second implication concerns the finding which shows that age of visitor is the only differentiating feature with regard to associations. In general terms, younger visitors use a more variable number of components in the construction of their mental images of museums and galleries. Older visitors are characterised by significantly less variability, probably reflecting greater previous experience with this environment. In terms of the numbers of constructs of the museums/galleries and their subject matter, however, the RGA results generally suggest that the consumer market cannot be differentiated, in respect of visitors' ages, their sex or places of origin. The more frequently employed constructions do not vary in their use across the consumer groups. A very important finding from the practitioner viewpoint is that many constructions of this environment are idiosyncratic or closely so, yet these are important aspects of the individual's decision making process. Such findings have significant implications for those marketing managers who are working in museums to grow the visitor numbers.

The stated objective of the paper was to support the application of the concept of branding in the world of museums and galleries. Museums have been encouraged to act as brands but it seems that visitors have not yet come to differentiate between them on the basis of anything but functional benefits. This research suggests that the rich texture of brand associations which consumers develop with well-loved and popular brands has not progressed in the same way with museums. The opportunity then exists for the marketing of museums to address and create their desired brand identities and associations.

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