Is a picture worth a thousand scales? Assessing visualself-report protocols to capture brand-related consumer emotional insights.

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Abstract

Within an experiential marketing context, companies and brands try to elicit strong emotions and affective feelings from their customers: it can be brand attachment or brand love for example. Because they are hidden and intimate (sometimes subconscious), understanding and capturing such consumer responses is very challenging for research analysts. There are many different methodologies, ranging from very qualitative (like projective techniques) to very quantitative ones (like Likert scales). Depending on the dimensions of the emotions we would like to study, cognitive, behavioral or physiological, some autonomic or self-reported instruments are available. The goal of our study is to assess different self-reported approaches that can be used to identify and measure consumers' emotional reactions towards brands they like. More specifically, we want to compare some traditional closed scales in which a list of items is proposed and evaluated through Likert measurements, to some more illustrated and spontaneous instruments using pictures or collages. The goal is to determine whether visual and spontaneous protocols are able to generate deeper insights than only closed groups of scales. The instruments are evaluated on some responses' quality criteria and on their ability to produce deep and accurate insights. The study is conducted in France and in Poland to test the international stability of the results.

Key-words

Collage - mixed methods - visual methods - brand attachment - emotions

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Introduction

Since the beginning of the 1990's much debate has developed in the world of marketing on the question of how to describe and capture the most important elements that drive the relationships consumers have with products and brands. More and more organizations are interested in acquiring knowledge about how consumers relate to products and brands, why some brands are preferred to others and even "loved" sometimes. Thus, these and other issues associated to the bonds established between consumers and brands, which may be associated to goods, services, organizations, celebrities, destinations, cities, and even countries, have gained prominence amongst researchers and practitioners (Loureiro, 2012).

Companies use design to create brand recognition (Karjalainen and Snelders, 2010) and also to elicit emotional responses from consumers and make them feel more attached to products (Aaker, 1996). It is challenging to make sure that the consumer perceptions of the physical properties of a branded product (e.g. color, shape, material, surface texture) do not conflict with the emotional responses that the brand company initially intended. The difficulty for

companies is first to understand the factors contributing to the generation of emotional responses by consumers when they face a new branded product and second to establish links between product properties and the consumer perceptions (Rasoulifar& Eckert, 2014), which we try to better understand.

Within a general context in which experiential aspects of consumption are also considered as crucial (Holbrook and Hirschman, 1982), various strong feelings can be observed in a consumer-brand relationship. Consumers can have a passion to the brand or hate it. Love is one of those strong feelings that marketers try to create between their brands and consumers (Albert et al, 2008). Once customers turn into brand lovers, it will be hard for competitors to attract those loyal ones. They may also become the ambassadors of the brand and try sometimes to "evangelize" around them. It is a reason why emotional and experiential consumer insights are getting more important and crucial for marketing decision-makers, especially in some areas or sectors in which those aspects are really central, like brand strategy, but also tourism, culture, entertainment or retailing for example.

But clearly, consumers' brand-related emotions are difficult to capture (Thomson, MacInnis, and Park, 2005). The aim of this study is then to evaluate some different instruments to capture brand-related consumer emotional insights, designed under different approaches. There is a growing trend of promoting the joint adoption of both verbal and nonverbal approaches for better assessing emotional responses and providing additional, deeper insights regarding associations made by consumers about brandsin large scale. Within a global context of a rising "image culture" (Jansson, 2002), we wanted to consider more illustrated and spontaneous instruments using pictures or collages, and test them within an international environment.

1. Emotions in the centre of the consumer-brand relationships

Experience has been clearly identified by many scholars as a core component of the consumption value. It has even been defined as a new economic paradigm by Pine and Gilmore (1999). Holbrook and Hirschman (1982) in their reference work stated that "emotions form an important substrate of consumption and that their systematic investigation is a key requirement for the successful application of the experiential perspective". Therefore, the emotional benefits generated by consumption experiences are considered as crucial, in the way consumers value the products, the services and the brands they use.

Customers' experiential value is based on holistic experience customers would have when they interact with a product. The interactions involve either direct usage or distanced appreciation of product (Mathwick, Malhotra and Rigdonc, 2001). The relative weight of the objective features of the product is lower than one would expect if considering the process from a more rational or utilitarian framework (Addis and Holbrook, 2001). The consumer behaviours rely on intuitive consideration of the relevant information and how that makes them feel (Dube and Mukherejee, 2003).

An important aspect of experiential consumption lies in recognising both the role of consumer emotions or subjectivities that represent the individual's "way of feeling, thinking or perceiving" (Addis and Holbrook, 2001), and how product-usage situations may produce subjective or emotional reactions in consumers (Holt, 1995).

According to Heath and Nairn (2005), feelings and emotions have primacy over thoughts, and emotional responses can be created even when we have no real awareness of the stimulus that causes them. Moreover, Martin and Morich (2011) understand emotions as catalysts that determine what stimuli we attend to or ignore, that affect our behavior and influence what we

choose to remember (Förster, 2014), however emotions are notoriously difficult to measure (Bentley et al., 2005). As may author's emphasis (Batra and Ray, 1986; Edell and Burke, 1987; Derbaix and Pham, 1989; Derbaix and Pham, 1991; Desmet, 2003; Köster and Mojet, 2015) it is very important to understand the consumer's emotional reactions to his/her thoughts to predict their attitudes towards brands and market behaviors. It is recognized that new techniques of observation, measurement and quantification of the phenomenon need to be developed (Derbaix and Poncin, 2005). On this level, real advances have occurred since polemical article of Zajonc (1980) who argued that emotion has primacy over and can function independently of cognition, emotions gained renewed attention and were being accepted as an important mediator of cognitive and behavioral consumer responses to marketing activities (Poels and Dewitte, 2006).

Emotions significantly determine customer behaviors and represent one of the topics in marketing and consumer research. Research shows that emotions can predict consumer's behavior in different areas (Mogilner, Aaker, &Kamvar, 2012; Kim, & Park, 2010; Labroo&Ramanathan, 2007; Shiv &Fedorikhin, 1999). There are commonly three components of emotions: cognitive, behavioral and physiological (Gil, 2009). Our research is focused on the understanding of the cognitive dimensions.

It is essential that marketing managers are able to understand what are the "efficient" emotions related in their specific industries for the development of the brand value. It is also crucial to monitor the emotional reactions elicited by the consumption experience with their brands and more generally by all their marketing activities, like product design, advertising campaigns or communication instruments like Web sites or applications for example. To do that, researchers need reliable and precise instruments since insights related to strong brand-relationship and experience are not so easy to capture. This is mainly because by nature, they are often subconscious, intimate and sometimes hidden (Holbrook and Hirschman, 1982).

2. How to capture strong brand-relationship expressions? An overview of the measurement methods.

Measuring emotion has been primarlyused as a method in the fields of psychology and sociology. Many studies, with varying approaches and relevancy to the measurement of emotions, have been conducted to develop reliable methods of assessing emotions. Following the increasing importance of the role of emotions in product design, marketing researchers started to use different emotion measurement methods to capture consumer emotional responses, mostly by computer-based techniques (Erdogan-Frost and Bayazit, 2008).

Methods of assessing emotions can be divided according to the components of the emotional response as follows (1) affective self-reports, (2) physiological measurements (e.g. skin conductance, pupillary responses, pulse rate), and (3) behavioral changes (e.g. facial action coding system, e.g. Ekman, Friesen and Ancoli, 1980; Kaiser and Wehrle, 2001; Förster, 2014; Kim, Cho and Kim, 2015).

Self-report measurements

Self-report measures register the respondent's subjective feeling. A "subjective feeling" can be defined as the consciously felt experience of emotions as expressed by the individual (Stout and Leckenby, 1986). In general, it can be divided into three types of self-report methods that all measure subjective feelings: verbal self-report, visual self-report, and moment-to-moment rating (Poels and Dewitte, 2006). Verbal self-report instruments assess the subjective feeling component of emotions, where each emotion involves a specific basic feeling. The most popular instruments require respondents to report their emotions using a set

of rating scales or verbal protocols. The rating scales can be assembled to represent any set of emotions as well as mixed emotions (Desmet, 2003). Verbal self-report is now mostly being applied as a set of emotion adjectives that need to be scored by means of semantic differentials or Likert scales. However, there was a traditional attempt to measure those concepts through classical quantitative tools, like sets of pre-defined items evaluated by Likert scales. For example, the emotional attachment of Thomson et al. (2005) is measured by scale ranging from 1 (*describes poorly*) to 7 (*describes very well*), to assess a range of feelings like "affectionate", "friendly" or "peaceful". Albert, Merunka and Valette-Florence (2008) are also using quantitative scales to evaluate the various dimensions of brand love like passion, self-congruity or uniqueness.

Those self-reported emotional measurements may be biased by cognitive or social desirability problems (Poels and Dewitte, 2006). It is also proved that – because of emotional granularity issues (Lindquist and Barrett, 2008) - it is sometimes difficult for some people to easily and properly verbalise the specific emotions they feel.

Similar to verbal self-report, *visual self-report* instruments measure subjective feelings. Instead of relying on verbalizations or a list of emotion words, responses of visual self-report are based on cartoon-like figures representing different emotions or emotional states. One of the most popular is the self-assessment Manikin scale (Bradley and Lang, 1994). The last one *in moment-to-moment* ratings respondents are asked to rate e.g. advertising stimulus by indicating in real time the strength of the perceived magnitude of an emotional dimension or a specific emotion in relation to a (neutral) reference point (Poels and Dewitte, 2006).

Autonomic reactions

As stated above, emotions are accompanied by (bodily) reactions that are partially beyond an individual's control. These "autonomic" reactions include facial expressions (e.g. smiling, frowning) and physiological reactions (e.g. sweating) primarily caused by changes in the autonomic nervous system (Bagozzi, 1991; Winkielman, Berntson, and Cacioppo, 2001; Droulers and Lajante, 2015). Through the use of specialized apparatus (i.e. diodes, thermometers, etc) it is possible to quantify the physiological changes the body experiences as a result of an emotion triggering edent. In fact, the autonomic reactions are manifestations of lower-order emotional processes.

Each emotion is associated with a particular pattern of expression (Kim, Cho and Kim, 2015). It should be possible to infer a person's emotional state from vocal characteristics, facial displays, and whole-body behaviours. The assessment of vocal characteristics appears to be especially useful in understanding levels of emotional arousal, with higher levels of pitch and amplitude associated with higher levels of arousal. By contrast, facial behaviours appear to be particularly sensitive to the valence of a person's emotional state. An important caveat, though, is that a number of factors such as gender, culture, expressiveness, and the inferred presence of an audience, likely moderate relations between emotional states and facial behaviours. This may be true to such an extent that the absence of changes in facial behaviour should not be equated with the absence of an emotion, and vice versa. Body posture has not received a great deal of attention as a measure of emotion. Yet, studies that have been conducted suggest that pride and embarrassment are associated with expansive versus diminutive postures (Mauss and Robinson, 2009).

However, physiological and behavioral measurements are difficult to use for a larger sample and in a brand context. Firstly, physiological measurements allow to detect the occurrence of even mild emotions, but they do not uncover which specific emotion is attached to the brand. Secondly, the measurement of behavioral changes, e.g. by using facial action coding systems, does not consider marketing specific emotions yet. Those autonomic measurements are well-

adapted to advertisement testing for example (Droulers and Lajante, 2015) when the stimulus is precise and temporized. But brand-related emotions elicit more durable emotional states and they probably need a more qualitative assessment, not only intensity or valence.

Thus, the methodology of affective self-reports is probably the most appropriate way to measure brand related emotions. They gauge subjective feelings requiring respondents to report their emotions with the use of a set of rating scales or verbal protocols (Förster, 2014).

Introducing some qualitative and mixed approaches

On the other side of the methodological bridge, conventional qualitative methods (like projective or visual techniques) can certainly be used (Hofstede et al., 2007). But they may have some limitations in terms of generalization, since generalization is even rejected as a goal in those approaches (Denzin, 1983).

It has been shown recently (Herz and Diamantopoulos, 2013) in a study about the associations related to countries (country-specific associations) that visual methods (collage in this case) were more efficient to capture the emotional associations about consumption. The authors point out that the adoption of joint verbal and nonverbal approaches provides additional insights regarding associations made by consumers about brands.

Therefore, researchers need to consider some new "mixed" protocols (Spanjaard, Young and Freeman, 2014) to combine the interests of both qualitative techniques (spontaneity and depth of analysis), and quantitative techniques (volume and objectification). There is a clear and recent growing trend of interest for mixed methods in the social sciences, to bridge the traditional gap between extreme positivist or interpretativistapproaches.

More specifically, it is envisaged to develop some electronic versions of traditional qualitative visual methods (like collages for ex.), to update them and take advantage of the power of dissemination of the Internet. The theory of "dual-coding" presupposes the primacy of images to capture the most emotional nonverbal reactions (Paivio, 1971). The use of pictures as means of expression for emotional reactions was recently discussed and validated by a research by Yoon, Desmet and Pohlmeyer (2013). In the field of design studies, they used pictures to facilitate "emotional granularity", for a finer and deeper expression of emotional reactions.

Some recent research projects have started to investigate the efficiency of such protocols like the "on-line wall of pictures" (Ganassali, 2016) or the "quali-quant synaesthesia" (Pawle and Delfaud, 2014) for example. The general concept is on one hand to keep the basic advantages of classic qualitative techniques like depth and subtlety of analysis and to increase the number of observations, on the other hand especially thanks to some multimedia Web protocols. That would result in a more significant number of responses, which allows the researcher to analyse and discuss the observed outcomes on a more objective basis.

3. Objectives and methodology of the study

In order to identify what could be the most adapted measurement tool to capture emotional bonds between consumers and their brands at a large scale, we would like to compare the efficiency of some various self-report protocols. More specifically, we want to compare some traditional closed scales in which a list of items is proposed and evaluated through Likert measurements, to some more illustrated and spontaneous instruments using pictures or collages. We want to determine whether visual and spontaneous protocols are able to generate better and deeper insights than closed groups of verbal scales only.

Satisficing

To evaluate the efficiency of those competitive protocols, we first had to establish the relevant criteria to definea global assessment of the quality of responses. We based our analysis on some previous works that consider a wide definition of the concept of quality of responses (see Ganassali, 2008 for ex.). Because most of the issues with the quality of responses are related to survey respondents' "satisficing" attitude (Oppenheimer, Meyvis and Davidenko, 2009), most of the following criteria are mainly based on the consequences of satisficing behaviours (Lapeyre, Malas and Guiot, 2015). The basic idea of satisficing is that « respondents sometimes do just enough to satisfy the survey request, but no more » (Krosnick, 2000). "Rather than continuing to expend the mental effort necessary to generate optimal answers to question after question, respondents are likely to compromise their standards and expend less energy instead » (Krosnick, 1991). The consequences of satisficing behaviours in the survey process are very negative in terms of responses' quality: abandoning the survey or terminating the survey early, rushing on online surveys, skipping items, randomly selecting a response or non-differentiation in using rating scales (Krosnick, 1991). Likelihood to satisfice is linked to respondent ability, respondent motivation and task difficulty (Krosnick, 2000).

Criteria to assess the quality of responses

Accordingly to the possible consequences of satisficing responding behaviours, we consider first the **response rate**: being the proportion of respondents who submitted a response (whatever their quality is) among those who were invited to answer. Secondly, the **completion rate**indicates the proportion of the tasksproperly completed by the respondent, compared to the full number of presented tasks (for example the number of completed answers compared to the total number of questions in the survey). Accordingly, we also take into consideration the **completion time.** Wealso are interested in the **evaluation** of the instrument by the respondent, in their capacities of favouring the respondent's ability and motivation and to reduce the task difficulty.

Then, we can get a double assessment of satisficing behaviours and the related quality of responses: a declarative one via the final evaluative questions and a factual one through the actual response behaviours. It is therefore possible to check whether the two assessments are correlated or not.

Since our goal is to check whether pictorial protocols help to generate deeper insights, we secondly consider- from a more qualitative point of view - the additional "evocative richness" of the pictorial protocols. The evocative richness measures the volume of relevant contents formulated by the respondents in their verbatim. For example, via a systematic content analysis, it is possible (see Mossholder et al. 1995) to quantify the number of experiential or emotional insights included in the textual responses to the open-ended questions of the survey. In our case, it will be possible to compare insights obtained from different protocols for the same brands and see what instrument provides us with the most specific and accurate information.

3. Methodology

We have designed three versions of the same consumer survey dedicated to identifying somebrand-related consumer emotional insights. The three protocols share the same introductory stage - in which they are asked to say what their favourite brand currently is - and the same final section dedicated to the evaluation of the survey (ability, motivation and task difficulty).

Visual against scales protocols

We have developed three self-report instruments. The first protocol is simply based on the **emotional attachment scale** developed by Thomson et al. (2005). It is made of ten items evaluated through a Likert-scale. It can be defined as "assisted declarative".

The second is "assisted associative": it consists on an online "wall of pictures" elaborated according the principles defined by Ganassali (2016). The respondents are asked to choose three pictures to describe - in that case - their feelings towards their favourite brand. In the next screen, the three pictures are presented to them again, and they have to explain why did they choose them and what do they represent to them. It was proved that those kinds of mixed protocols were promising to stimulate the abundance and diversity of responses, in consumer behaviour studies.

The third scenario is spontaneous associative and, like a collage, the consumers may choose the pictures they want to express their feelings. It is called the "on-line collage", and starts from the results of some first experiments ("Album on Line" for example - Vernette 2007) and combines the advantages of several existing techniques. In the AOL process, participants extracted keywords from stories associated with the studied experience, and select images on the Web. A collective album is subsequently made by a moderator or by a process of collective selection. In the on-line collage protocol, respondents are requested to search pictures on the Web and upload them into the survey questionnaire, as an individual expression of their emotions towards any relationship with a brand or consumer experience.

Digital visual anthropology protocols

Pictures-collection methods or "collages" have recently experienced a significant revival of interest. Established for several decades, the ZMET method (Zaltman, 1997) proposes the respondent to compose a collection from several pictures he has chosen to express its views on the topic under study. The recovered images give rise to a discussion with the analyst that records and interprets the explanations of the respondent according to a defined protocol (Zaltman and Coulter, 1995). The technique of "photo-language" is also very popular in the social sciences. It consists of giving voice to the participants (in groups or individually) on the basis of a collection of pictures prepared this time by the researchers, (see Baptiste et al., 1991). Those Web pictures-based protocols can be compared to a more recent methodological trend defined as "digital visual anthropology" (Pink, 2011). It is important to connect this type of approaches to the growth - in contemporary Western societies – of what some authors call the "image culture". According to the "image culture", the media images are used more and more often (like on Facebook, Instagram or Snapchat for example) as sources and expressions of cultural identity (Jansson, 2002) and they constitute the echo or even the subject of many modern phenomena of consumption, especially for the younger generations.

We also knowthat manipulated imageson digital mediaare veryinterestingto allowthe respondent toformulatesensory oremotional responses more easily, shownbyPawleandDelfaud(2014) in a study about instantcoffees.Suchprotocolscan also experientialperspectiveto contributeinan a form ofco-creationof products. perfectlyillustratedby the PixmeAwaywebsite(Neuhofer, BuhalisandLadkin, 2014)in the fieldof tourism.

The three tested protocols

The following figures illustrate the three protocols and the way they are concretely presented to the survey target respondents.

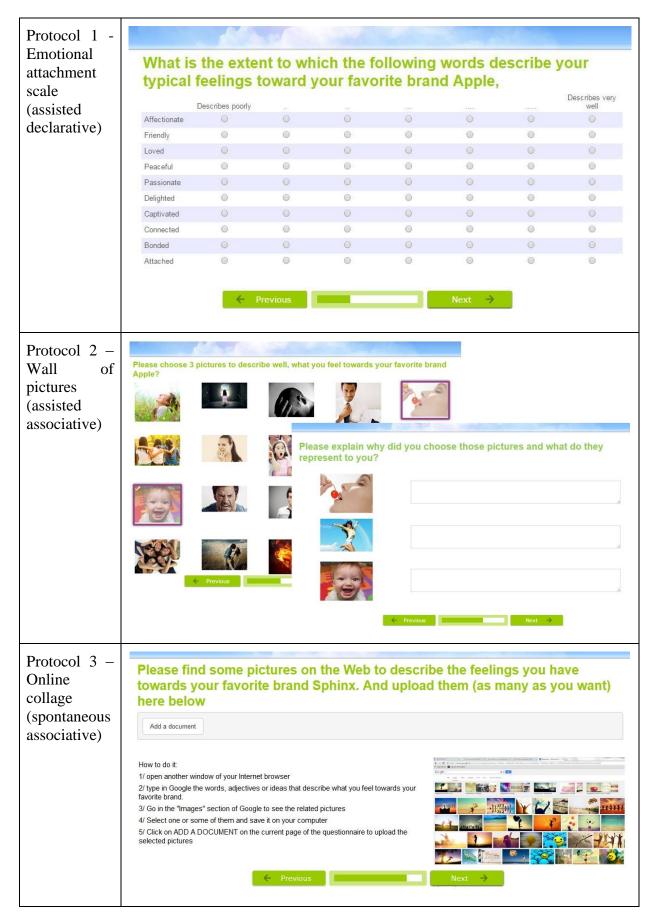


Figure 1 - Screenshots of the three different tested protocols

Sample

For that methodological piece of research, we used a convenience sample. In November 2015, the surveys were first circulated through two groups of Bachelor and Master students in two countries: France and Poland, to test the international stability of the results. They were also distributed to a panel of company managers in France to get a bigger variety of profiles in terms of generations. The three versions of the survey were randomly assigned to any target contact¹. In total, we got 532 responses. The average age of the respondents is 31 years. 60% of the sample is composed of female respondents and the level of education is quite high (on average, between 3 and 4 years of higher education).

4. Results and conclusions.

Dropouts, time and completion rates

As we can see from the table below, the dropout rates are similar for protocols 1 and 2 (between 5 and 6%) and it is higher for protocol 3 which reaches almost 20%. The completion times for the 3 different protocols are difficult to compare because the tasks are quite different. It isnaturally much longer to browse the Web and upload some significant pictures: the survey with the 3rd protocol takes almost 10 minutes on average. The two first protocols result in a shorter survey: almost six minutes for the wall of pictures and five minutes for the first protocol proposing scales.

For the completion rate, we are interested in the proportion of missing values, in the various situations, considering that only the very first question related to the favorite brand is programmed as mandatory and cannot be skipped. The highest completion rate is obtained for the wall of pictures protocol: more than 91% of the respondents completed the full task by choosing two pictures and justifying their choices with some free texts. 87% of the participants completed all the ten scales for protocol 1. Finally, only 82% of the respondents uploaded one or several picture(s) for protocol 3 and justified their choices with some free texts. On average, they would upload 2,5 pictures.

	Dropout rate	Average completion time (excluding 5% lower and higher)	Protocol completion rate	
Protocol 1(emotional attachment scale)	5,7%	4 mn 58 sec	87,2%	(*) Significantly different from P1 and P2 at p<0,05
Protocol 2(wall of pictures)	5,4%	5 mn 48 sec	91,4%	(**) Significantly different from P2 only at p<0,05 (Exact Fisher tests)
Protocol 3(online collage)	19,8% (*)	9 mn 25 sec	82,3% (**)	(Exact Pisher lesis)

Table 1 – Dropout, completion rates and completion time for the three tested protocols

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¹Accordingly, we get similar profiles of respondents for the 3 protocols, in terms of sociodemographic variables: age, gender and level of education.

Ability, motivation and task difficulty

Since the likelihood to satisfice is linked to respondent ability, respondent motivation and task difficulty (Krosnick, 2000), we also wanted to compare the perception of the respondents on those dimensions for the three different protocols. In the end of the survey they were asked to assess the questionnaire with eight related questions and a wall of pictures.

As we can read from the table below, protocol 1 (the emotional attachment scale) is considered as easy and quick but not very interesting and enjoyable. In addition to that, its score for expressiveness is low. Protocol 2 (the wall of pictures) is well evaluated: quite easy and quick, exciting, enjoyable and helpful to express feelings. Protocol 3 (the online collage) is rated higher for feelings expressiveness and lower for quickness and easiness. The chosen pictures that are associated to the protocols are consistent with the evaluations. For example, as shown on figure 2, the "wasting time" picture is frequently chosen by protocol-1 respondents, and the "enthusiastic" representation is linked to protocol 2 and "challenging" to protocol 3.

	Protocol 1 (emotional attachment scale)	Protocol 2 (wall of pictures)	Protocol 3 (online collage)	Significant differences at p<0,05 (t test)
It is well-designed	3,71	3,99	3,76	None
It helped me to express accurately my feelings	2,76	3,27	3,35	P1≠P2 and P1≠P3
It motivated me to answer	3,31	3,71	3,18	P1≠P2 and P2≠P3
It was easy to use	4,89	4,97	3,72	P1≠P3 and P2≠P3
It was easy to answer	4,55	4,65	3,73	P1≠P3 and P2≠P3
It was interesting	3,49	3,81	3,78	None
I enjoyed it	3,55	3,92	3,73	P1≠P2
It was quick	5,19	5,20	4,09	P1≠P3 and P2≠P3

Table 2 – Respondents' evaluations for the three tested protocols

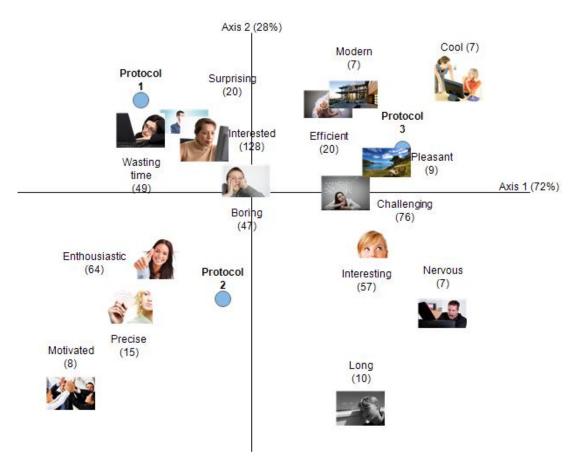


Figure 2 - Tested protocols and chosen pictures: correspondence analysis

Evocative richness

Comparing the evocative richness of such different protocols is a real challenge. Since the richness is also probably related to the nature of the favourite brands, we decided to compare the insights produced by the three protocols mainly for the two most frequently chosen brands: Apple and Ikea. Then, we can see whether – for the same types of brands – researchers can get less or more information through visual protocols, and the nature of them.

First protocol (emotional attachment scale)

10% of the evaluations state that the proposed items describe poorly the emotions. That figure raises to 24% if we take the precedent grade (just before "describes poorly").

From a traditional Likert-scales protocol, we can clearly compare the level of emotions elicited by the two brands. Generally, Apple is emotionally higher than Ikea. For that first brand, the level of connection is specifically strong (5,58 out of 7). However, the Swedish brand is considered as more friendly and peaceful than Apple.

	Apple	Ikea
Affectionate	4.05	2.94
Friendly	2.65	3.63
Loved	2.70	2.00
Peaceful	2.82	4.41
Passionate	3.91	2.35
Delighted	4.67	3.71
Captivated	4.83	4.00
Connected	5.58	3.94
Bonded	4.36	3.75
Attached	4.86	4.50

What is the extent to which the following words describe your feelings toward your favourite brand?

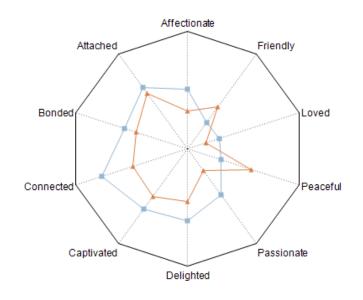


Figure 3 – Emotional differences between Apple and Ikea captured by protocol 1

Second protocol (wall of pictures)

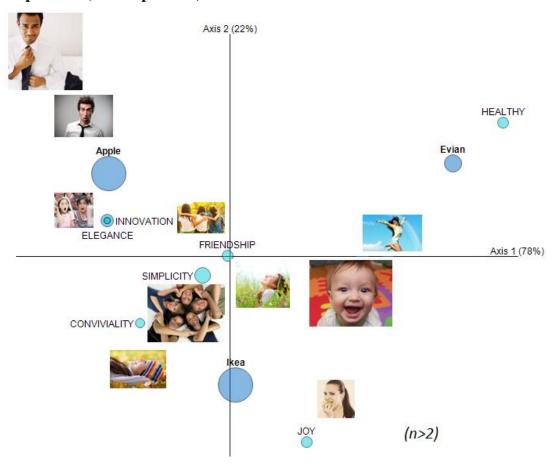


Figure 4 – Emotions captured by protocol 2: correspondence analysis

Correspondence analysis is one of most convenient data analysis and representation for performing some of the major results obtained from the wall of pictures (Ganassali, 2016). As depicted in the figure below, brands, selected pictures and textual justifications can be represented together on a factorial map, so that associations may appear. Textual data coding was performed through lexical analysis (Bolden and Moscarola, 2000) which produce quick (but limited) insights. In our example below, it is quite clear that Apple is associated with emotions like professionalism (see picture on the top left) innovation, eleganceand maybe impressiveness too (other pictures close to the brand). In those results, Ikea relates to conviviality, joy, peacefulness and friendship. The third brand Evian was only plotted on the factorial map so that we could better visually differentiate the two other ones.

Third protocol (online collage with uploaded pictures)



Figure 5 - Pictures uploaded to express feelings towards Apple

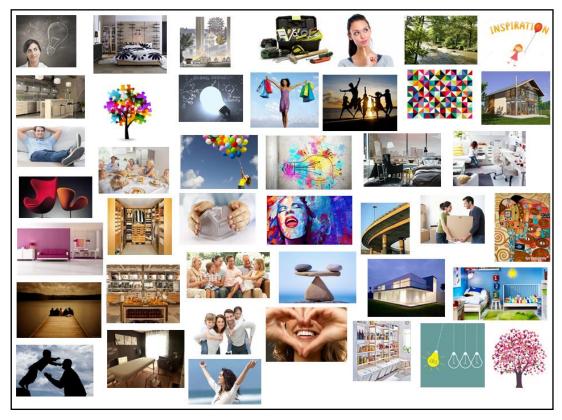


Figure 6 - Pictures uploaded to express feelings towards IKEA

Based on around 20 respondents per brand, we can analyse the uploaded pictures for the two brands in a systematic way. Three topics are coded by a procedure of content analysis (Bell, 2004): colors, genders and dominant emotions of course. We can clearly see that evocations are quite different for the two brands. Apple is black and white (and a little grey too) while Ikea is whiter, more multicolor. Ikea is more feminine. As far as the emotions are concerned, our coding shows that the associations for the two brands are:

- Efficiency, polyvalence and touch for Apple, with some aspects of innovation, simplicity and esthetics too,
- Profusion of colors and aesthetics mainly for Ikea, with some minor dimensions of sharing, creativity/inspiration, joy and comfort.

	Apple	Ikea
Colors (n>3)	White (18) and Black (17) Grey (9) Blue (6) Red (5) Yellow (4)	White (21) Multicolor (10) Grey (10) Blue (10) Brown (10) Black (4)
Gender (n>3)	Male (8) Female (6)	Female (9)
Dominant emotions (n>2)	Efficiency/reliability (8) Touch (5) Polyvalence (4) Innovation (3) Simplicity (3)	Multicolor (10) Aesthetics/design (9) Profusion (7)

Aesthetics/design (3)	Sharing (6) Creativity/inspiration
	(6) Joy (5)Comfort (4)

Table 3 – Some content analysis' outcomes of the uploaded pictures

Conclusions

It is not surprising to see that the three protocols provide researchers with different levels of quality and different types of insights. As far as the quality of responses is concerned, it is important to notice that the Likert scales are considered rather positively by the consumers. They are rated as quick and easy to use and answer. Consequently, the dropout rate associated to that instrument is low (6% in our example) and the completion rate is acceptable (87%). At the opposite side, the online collage protocol is considered as more demanding: the dropouts are more frequent (almost 20%) and the task completion rate is lower (82%). That means that in the end, only 2/3 of the respondents perform the demanding task they are requested in that situation. The wall of pictures is very well evaluated by the respondents: quite easy and quick, but also interesting and pleasant. The completion rate is the highest (91%) and the dropout rate the lowest (5,4%).

Regarding the depth of the insights, the Likert scales are very standardised and therefore easy to analyse for comparing consumers' perceptions about some different brands. However, the quality of the insights is strongly related to the accuracy of the tool for capturing the studied phenomenon. In the case of emotions, it seems quite challenging to find the right instrument able to capture a wide variety of emotions. In our example, the emotional attachment scale (Thomson et al., 2005) first manages to show that one brand is globally higher than another one in terms of global emotional intensity. It specifies the dimensions on which the "competing" brands are better: connection for Apple, friendliness and peacefulness for Ikea in our case. Anyway, it's quite difficult to be sure that some important brand emotions are not missing because they could not be properly captured by that standardized instrument. Like all positivist tools (Mukherji and Albon, 2014), that sort of scales possibly lacks in accuracy and may produce superficial information. Especially for emotions, it is admitted (Paivio, 1971) that their verbalization is not always easy or possible. Our respondents rate that scale protocol quite low in terms of expressiveness. In addition to that, 40% of the consumers are picking only three points or less within the whole set of seven modalities. In the lists of scale questions, the respondents sometimes tend only to choose a very narrow range of responses from all the possibilities. This behaviour pattern is called "non-differentiation" and shows a lack of interest and a weak level of effort for answering (Ray and Muller 2004).

This is mainly why visual protocols may be specifically promising. We have tested two of them and they clearly seem to provide researchers with deeper insights. The respondents clearly rate those visual instruments as more interesting, enjoyable and expressive. The online-collage - as a very spontaneous instrument - provides researchers with more specific emotional responses. For example, the multicolor feeling associated to Ikea cannot be easily elicited through pre-defined scales of emotional attributes. However, as shown in our experiment, that protocol may increase significantly the number of dropouts, because it may be perceived sometimes as difficult and demanding. If we look at the respondents' evaluations, the wall of pictures seems to be a good compromise between convenience and expressiveness. Looking at the insights we got from the responses, they are more specific as the Likert scales dimensions, but clearly less rich than the ones obtained by the online collage. But the quality of data and the respondents' assessment (see tables 1 and 2) are higher.

More than promoting one protocol instead of another, we may learn from our experiment that those different emotions self-report measurements are adapted to some diverse research situations. Likert scales are useful for very confirmatory or comparative analyses, when researchers are clear about the nature of the emotions they want to assess. In that case, they may resort to the related instruments like the ones specifically developed for brand love (Albert et al., 2008) or brand trust (Delgado-Ballester et al., 2003) for example. For a more exploratory approach, the on-line collage may be well-adapted. In fact, as a spontaneous, open and projective protocol, disseminated in large scale through the Web, that instrument is probably able to identify more precisely the various dimensions of the emotional relationship between consumers and their favorite brands. The combination of visual and textual responses provide researchers with a wide set of information, which they naturally have to interpret and recode cautiously. The same applies for the online wall of pictures. Since the respondent is proposed a selection of 20 to 30 pictures, that instrument is less open than the collage. But the textual justifications (second stage of the protocol) may also elicit some more specific and precise emotional states. For that purpose, further research may tend (as an example)to design a generic wall of brand-related emotional pictures, able to capture a wide range of affective responses towards brands.

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