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“Experiences” as the Principal Economic Offering in Service Delivery Systems:

Is the PAD Paradigm an Appropriate Aid to their Design?

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Abstract

This paper answers a call in Service Operations Management (SOM) literature for more research into experiences, experience servicescapes and the arousal of emotions in customers of an experience service concept. It does so by linking environmental psychology with SOM.

The advantages and challenges of applying the “P(leasure) A(rousal) D(ominance)” scale to ‘measure’ emotions evoked within customers in different types of experience servicescapes are discussed. After that, we provide a number of propositions linking the underlying variables of the PAD scale to the various aspects of experience servicescapes.

Thus, a forward step is made towards establishing a contingency approach for designing experience service delivery systems based on a quintessential element of experiences, namely the emotions that are evoked in the target market customers of such service delivery systems. This step could provide SOM researchers and practitioners with initial guidelines for the design of “experience service delivery systems”.

§1 Introduction

Recently, within the field of Service Operations Management (SOM) literature there has been a surge in interest in a category of economic offerings called “experiences”. Pine and Gilmore put the concept of “experiences” on the map of management sciences (Pine & Gilmore, 1998,

1999). Borrowing on previous authors such as Tofler (1970) and Goffman (1959), Pine and Gilmore define experiences as economic offerings that have as principal characteristic that distinguishes them from other economic offerings the fact that they are “memorable”: “An experience occurs when a company intentionally uses services as a stage, and goods as props, to engage individual customers in a way that creates a memorable event. Commodities are fungible, goods tangible, services intangible, and experiences *memorable*” (Pine & Gilmore, 1998, p. 98).

Especially in marketing, under explicit referral to Pine and Gilmore the concept of experiences has quite resonated, and has given birth to related concepts. For example, a call has been made to integrate “experiences” into the value proposition of a company (Kotler, Wong, Saunders, & Armstrong, 2005), the importance of managing “the total customer experience” has been stressed (Berry, Carbone, & Haeckel, 2002; Gentile, Spiller, & Noci, 2007; Hume, Sullivan, Liesch, & Winzar, 2006), and Prahalad & Ramaswamy (2004) have introduced the concept of “customer co-creating experiences”¹.

Roth and Menor (2003) apply the concept of “experiences” within the field of SOM by stating: “experiences, by definition, are memorable, individualized and unique offerings” (Roth & Menor, 2003, p. 157). Also, within the field of SOM, Voss, Roth, & Chase (2008) relate the memorability of experiences to their characteristic of inducing emotions in the customer: “evoked customer emotions that engage customers in memorable and meaningful ways are central to the [experience] service offering” (Voss et al., 2008, p. 3). Hartsuiker (2008) relying on Pine & Gilmore (1998, 1999), Roth & Menor (2003) and Sampson &

¹ For a more complete discussion, see Hartsuiker (2008).

Froehle (2006), has proposed that within SOM, experiences may best be defined as economic offerings that have two quintessential features:

- The constant aim of emotionally engaging the customer.

- The required presence of the customer, either physical or mental, in at least part of the production process of an experience.

Several authors have emphasized the importance for research into experiences within the field of SOM. For example Chase & Apte (2007) noted that “experiences” are one of the “big ideas” that have set the agenda in SOM research. Roth and Menor (2003) claim that “more SOM work is needed to study antecedents of delivering successful experiences” (Roth & Menor, 2003, p. 157). In this paper, we intend to focus on the physical environment or servicescape where an experience is actually produced in the customer. Just as is the case with experiences, servicescapes are considered an important but ill-researched subject within SOM. Roth and Menor (2003) note that in comparison to non-experiential services “customers play a greater co-producing role in the delivery of experiences ” (Roth & Menor, 2003, p. 157). For this reason, they state that the influence of the servicescape on the service concept of an experience is profound. However, Roth and Menor (2003) come to the conclusion that “yet, little empirical research in SOM exists regarding design choices and contingencies affecting the experiences created by different servicescapes” (Roth & Menor, 2003, p. 157). In line with this conclusion, Ezel & Harris (2007) observe in regard to servicescapes that “there is a dearth of empirical research into this phenomenon” (Ezel & Harris, 2007, p. 59). As emotions are of great importance in the concept of an experience, we may see a gap in SOM theory that Voss et al. (2008) describe as: “one of the intriguing new

challenges of an OM service strategy” (Voss et al., 2008, p. 3). This gap concerns the issue that according to Voss et al. (2008) “we typically found that seeking to evoke engaging emotions that would lead to desired customer behavior was implicit rather than explicit in the business models of the organizations” [that have been researched by us] (Voss et al., 2008, p. 28).

In this paper we attempt to link three concepts: experiences, emotions (as a quintessential element of those experiences), and servicescapes as the place where these emotions are produced. We do this by drawing up a preliminary framework showing how experience servicescapes might differ from each other based on the emotions their respective servicescapes evoke in their target market customers.

In this paper, we first place our inquiry in the general framework of SOM as proposed by Roth & Menor (2003). Next, we will examine which scales can best be used to measure emotions in customers. With some reservation we will consider the so-called PAD scale by Russell & Mehrabian (1974) as best suited for this purpose. Subsequently, an argument is made for the inclusion of dominance in the PAD scale, a scale element whose inclusion in the PAD scale has been regarded as controversial (Russell, 2003; Yani-de-Soriano & Foxall, 2006) but whose inclusion seems very relevant in the case of measuring emotions aroused in customers by experience service delivery systems. After this, we try to link different values of the PAD scale to different types of experience servicescapes by drawing up preliminary propositions we plan to test in a multiple case study.

§ 2 The organization of experiences depicted within a SOM framework

Before we start linking the types of emotions to different types of servicescapes, we tightly root our inquiry within SOM theory. We do this by showing how our inquiry relates to a general framework of SOM theory as proposed by Roth and Menor (2003), and which was further specified for experiences by Voss et al. (2008).

Relying on, among others, Fitzsimmons & Fitzsimmons (2000), Goldstein, Johnston, Duffy, & Rao (2002), and Sasser, Olsen, & Wyckoff (1978), Roth and Menor (2003) phrase the fundamental question of SOM as follows: “what theoretical and practical insights can be discovered that will enable firms to effectively deploy their operations in order to provide the right offerings to the right customers at the right times? To answer this question an operations perspective considers the strategic alignment of three factors: 1) the targeted market and customer segments 2) the notion of a service concept as a complex product bundle (or “offering” to consumers) and 3) the service delivery system” (Roth & Menor, 2003, p. 148).

Hence, we will briefly explain how these insights will be obtained within our research project:

1) According to Roth and Menor (2003) the *target market* is usually segmented based on operational attributes such as customer contact and degree of labor intensity. Since experiences have as a key attribute, the aim of constantly attempting to emotionally engage the customer, it may be interesting to investigate if the different ways of being engaged emotionally preferred by target market customers, correspond with different ways of operating an experience service delivery system. This is what we intend to investigate in our research inquiry.

2) Voss et al. (2008) propose that the *service concept* of an experience service offering can be divided into two main components: the service bundle and the experience factors. The service bundle contains all the components service concepts of “traditional” services usually consist of, such as the explicit service (e.g., the provision of transportation and the satisfaction of hunger), supporting facilities (e.g., roller coasters and facilities layout), facilitating goods and information (e.g., respectively food and schedules of shows). The experience factors consist of perceptions, emotions, sensations, imagination and feelings provoked in the customer by the uniqueness, knowledge, novelty, memorability and beauty of the experience offering. Voss et al. (2008) stress that in an experience service concept, experience factors need to be addressed as extra components of the service concept, instead of being considered as “just” service enhancements. In this project, we want to focus on a crucial element among the experience factors of a service concept, namely the emotions evoked in the customer (Hartsuiker, 2008; Pine & Gilmore, 1998, 1999; Voss et al., 2008).

3) The last part of the service strategy triad is the *service delivery system* that realizes a particular service; it may consist of the following elements (Roth & Menor, 2003; Voss et al., 2008):

- *Infrastructure* (Roth & Menor, 2003), or “*orgware*” (Voss et al., 2008) involving infrastructural management systems and policies. Examples of infrastructure or orgware are Human Resource Management (HRM) and leadership and management structures: an example of the leadership and management structures is the degree of enablement of employees, for example, should unexpected events occur, are operational personnel empowered to take decisions themselves, or does every decision still needs to be approved by higher management?

- *Integration systems* (Roth & Menor, 2003), or “*linkware*”(Voss et al., 2008) that disperse information throughout the enterprise. An example of an integration system is a customer information system at the Ritz Carleton hotel that discreetly reports all the preferences of a particular customer (Pine & Gilmore, 1999; Voss et al., 2008).
- Perhaps most important of all, is *structure* (Roth & Menor, 2003), or *brick & mortar “stageware”*(Voss et al., 2008) that encompasses facilities and layout, technology and equipment and customer flows. In other words: structure or stageware represent the physical setting of the service delivery system. This physical setting is called the *servicescape* by Bitner (1992); the term “*servicescape*” can be applied as a synonym to denote the *structure* or *stageware*. Since the constant presence of the customer is required during the production of an experience, the servicescape is a key element in the service delivery system. Voss et al.(2008) seem to agree with this view by stating that ”for many experiential services, determining the architecture of the stageware is one of the first key choices of the service design” (Voss et al., 2008, p. 10) and “some of the most important choices [regarding the operating environment] must be made in the area of stageware. Like setting the physical stage in theater, stageware choices both determine the level of investment and directly contribute to the service”(Voss et al., 2008, p. 35). In our view all other elements in the service delivery system facilitate the servicescape, making the servicescape perhaps the most important part of an experience service delivery system.
- Voss et all (2008) also include “*customerware*” as a separate element of the service delivery system; customerware are specific points where customers interact with the experience service, be it via technology, personnel, or other customers.

Since in experiences these encounters always have to take place in the servicescape (because of the mandatory presence of the customer) we propose considering these customer touchpoints as part of the servicescape (or stageware).

Thus, we are able to define the servicescape for our research project as consisting of:

- Facilities layout
- Process technology
- Flows
- Customer contact points

Taken together, the above mentioned elements can form a functioning experience service delivery system which during or following execution of a particular experience service concept can be assessed by management (mostly based on customer feedback), possibly leading to renewal of this service delivery system based on the (mis)match with target market customer desires.

When the above mentioned service delivery system functions as it is intended by the management of the experience offering, this might bring customers to “perceived value and purchase, loyalty, and engagement behaviors” (Voss et al., 2008, p. 9). At least, this behavior entails a positive attitude in customers towards spending time in the servicescape of the experience service delivery system of this experience service concept. To phrase this in other words: these customers will show “approach behavior” towards the servicescape of this experience service delivery system. As “approach behavior” we can consider verbal or non-verbal communications of preference such as a desire for physical approach, exploration, affiliation and staying longer in a certain environment (Donovan & Rossiter, 1982; Mehrabian

& Russell, 1974). Although “approach behavior” may not guarantee a re-purchase of the experience service; if entrepreneurs in the experience business want their target market customers to make a repeat visit to the servicescape, it is vital that their target market customers’ experiences are produced in such a way that “approach behavior” is aroused in these customers.

§ 3 An excursion to environmental psychology: contemplation of different scales to measure emotions, PAD scale is most suitable for measuring “core affect”.

If we want to examine how a servicescape can evoke “approach behavior” depending on the kind of emotions that such a servicescape is arousing in customers, we might want to link with concepts from another theoretical discipline, that of environmental psychology. Turning to environmental psychology may be justified as one of the objects under investigation in environmental psychology is determining which factors account for the development of “approach behavior” towards a certain environment in certain individuals (Donovan & Rossiter, 1982; Foxall & Yani-de-Soriano, 2005; Mehrabian & Russell, 1974; Spangenberg, Grohmann, & Sprott, 2005; Spangenberg, Sprott, Grohmann, & Tracy, 2006).

According to Russell and Mehrabian (1974) when humans react to stimuli in an environment, these reactions can be characterized in three emotional responses that mediate between these stimuli and the approach and avoidance behavior these humans will show towards that environment. The three responses are *pleasure* (the degree of feeling positive about one’s environment), *arousal* (the degree of feeling of activation, both mental and physical, by one’s environment) and *dominance* (the degree of feeling unrestricted to act in a variety of ways in a particular environment). Together these three emotional variables “summarize the emotion-

eliciting qualities of environments” (Mehrabian & Russell, 1974, p. 8) and can be regarded as underlying dimensions that can compose a great variety of emotions customers can have towards an experience servicescape. To measure these three dimensions the PAD scale was developed by Mehrabian & Russell (1974). This scale was further refined by Mehrabian (1995) and consists of a 16 item scale for measuring pleasure, and two 9 item scales for measuring arousal and dominance respectively.

An important motive for choosing the PAD paradigm in our research project is that the PAD paradigm was specifically designed to measure emotional responses to environmental stimuli (Richins, 1997); according to Machleit and Eroglu (2000) “Pleasure, Arousal, and Dominance (PAD) dimensions of response represent the premier measure in the field of environmental psychology for assessing individuals' emotional responses to their environment” (Machleit & Eroglu, 2000, p. 102). Donovan and Rossiter (1982) call the PAD paradigm a “leading environmental psychology approach” (Donovan & Rossiter, 1982, p. 34). In addition, the PAD scale is also widely used in consumer research projects; based on Donovan and Rossiter (1982) and Havlena & Holbrook (1986) Huang (2005) concludes: “Mehrabian and Russell's pleasure–arousal–dominance (PAD) emotional scale is the most influential scale for the measurement of emotional experience in the consumer research literature” (Huang, 2005, p. 850).

Mehrabian and Russell (1974) intended the PAD paradigm to be suitable to measure any kind of emotions, but in later publications authors tend to believe that the PAD paradigm is most adequate for measuring emotions that can be categorized as “core affect”. We will explain this concept by placing it in the theoretical framework of Russell & Feldman Barrett (1999) and Russell (2003). Russell & Feldman Barrett (1999) note that the scope of the concept of emotion is extremely broad: it can include such diverse phenomena as feeling happy for no

reason, stalking and murdering someone, and giving lifelong love for one's offspring. For this reason, these authors observe: "to be sure, all the different sorts of happenings included within this grab-bag term [namely emotion] are important, some vitally so, but it is becoming increasingly clear that not all of them can be accounted for in the same way. No one structure of description and assessment can do justice to this heterogeneous class of events without differentiating one type of event from another" (Russell & Feldman Barrett, 1999, p. 805). To illustrate this observation, these authors suggest two terms: "prototypical emotional episodes" and "core affect".

According to Russell and Barrett: "A prototypical emotional episode is a complex set of interrelated sub-events concerned with a specific object" (Russell & Feldman Barrett, 1999, p. 806). This is what most people consider an emotion to be: an event such as fleeing from a bear, falling in love or avoiding a stranger. Prototypically, meaning in a "perfect situation", emotional episodes can be regarded as "packages" of the following phenomena:

- An *antecedent event*, with a certain *affective quality*, for example a bear that tries to attack us.
- *Core affect*: "Core affect is that neurophysiological state consciously accessible as the simplest raw (nonreflective) feelings evident in moods and emotions" (Russell, 2003, p. 148). "Core affect is primitive, universal, and simple (irreducible on the mental plane). It can exist without being labeled, interpreted, or attributed to any cause" (Russell, 2003, p. 148). An example of core affect is the occurrence of an unpleasant feeling in us combined with high arousal. At any time, we all have a certain level of core affect. However, the appraisal of the

an antecedent event (for example the bear attacking us) might change our level of core affect; because of this event we may experience increased arousal and lower pleasantness²,

- The antecedent affect is *attributed* to the current level of core affect. (E.g., we find that the *bear* arouses us in an unpleasant way).

- Then, the antecedent affect is *appraised* (e.g., in relations with one's goals). For example, we find it *scary* that the bear is attacking us, because we might die as a result of the attack, intervening with our goal to live.

- *Instrumental action* may be taken, which is action based on how a person feels as a result of the appraisal. This can, for example, result in approach or avoidance behavior. In this example, we may run away from the bear.

- *Physiological and expressive changes* can occur caused by core affect or preparation for or recovery from instrumental action. In this instance, we may shout out in fear of the bear.

- *Subjective conscious experiences* such as the feeling of a sense of urgency and anxiety may be experienced. Subjective conscious experiences seem to be made "hot", i.e., being felt like a real "living" emotion, thanks to the core affect. Most of subjective conscious experiences seem to be beyond our control.

- *Emotional meta-experience*. We may become aware of the "total package" of above mentioned phenomena taking place. In this example, we can notice that we are afraid for the bear.

- *Emotion regulation*. Finally, after having ourselves categorized as for example "being afraid" we are going to regulate our behavior within the norms of the culture we are in. This will place certain restrictions on our behavior and will lead to self-control. We will question ourselves as to what is an appropriate way of expressing our fear for the bear. For example, is it acceptable to kill him?

² The present authors wish to add to this: perhaps combined with lower dominance.

- During all these above mentioned stage, core affect continues to change.

In real situations the above mentioned “perfect” emotional episodes seldom all occur and the order of these elements can be different. Most of the emotional episodes, whether prototypical or not, as well as most instances of core affect can be called emotions (Russell, 2003).

As we have seen above, *core affect* is always present in any emotional episode. Russell and Feldman Barrett (1999) observe: “We believe that core affect is at the heart of any emotional episode, prototypical or not, which typically begins as an abrupt change in core affect in response to some event but develops further once cognitive structures are invoked, an object is identified, and behavioral plans are quickly formed and enacted” (Russell & Feldman Barrett, 1999, p. 806) According to Russell (2003) and Russell & Feldman Barrett (1999) core affect can best be described as a mixture of pleasure and arousal. In this way, all the core affect terms (such as happiness and anger) can be grouped on a circle, a circumplex structure³. This may give an indication for the adequacy of the PAD paradigm to measure core affect. Morgan & Heise (1988) imply as well that the PAD paradigm seems to be most adequate for measuring a concept similar to “core affect”, namely what Morgan & Heise (1988, p. 19) call “pure emotion terms: relatively free of trait, physical and cognitive implications”.

When the PAD scale is compared with contending paradigms, we may get additional proof that the PAD scales fare best in measuring core affect. Havlena & Holbrook (1986) note that

³ Since 1980, Russell has dropped dominance from the PAD scale because it seemed more of a cognitive dimension, more of an antecedent or consequence of an emotion. Thus Russell found dominance to belong more to the concept of an emotional episode than to the concept of core affect. Other authors, including Mehrabian have remained to include dominance in the PAD scale. We will discuss the desirability to include dominance in the PAD scale later in this text.

“the psychological literature has produced two major empirically based approaches to the description and categorization of emotions. One approach views emotions in terms of *dimensions* that distinguish among emotional states, while the other views all emotions as stemming from a relatively small number of basic emotional *categories*” (Havlena & Holbrook, 1986, p. 395). The first mentioned approach is the PAD paradigm (Mehrabian & Russell, 1974), the latter approach are the eight basic emotional categories as proposed by Plutchik (1980). The Plutchik scale contains the following discrete emotions: anger, joy, sadness, acceptance, disgust, expectancy, surprise, and fear. Machleit & Erodu (2000) also involve a third scale in their comparisons: the Izard scale (Izard, 1977). This scale contains the following discrete emotions: anger, joy, sadness, acceptance, disgust, expectancy, fear, shyness, contempt and surprise. Thus, the Izard scale employs concepts that are often similar to the Plutchik scale. Although Havlena & Holbrook (1986) and Machleit & Eroglu (2000) do not mention this explicitly, the later two scales also involve more cognitively mediated emotions, emotions that for example according to Russell (2003) would not belong to core affect per se, but instead to emotional episodes “surrounding” core affect. For example acceptance and expectancy are always with regard to a particular object and involve a reevaluation of events that have occurred (as is the case with acceptance) or an evaluation of a certain future plan (as is the case with expectancy).⁴ When the different scales are tested against each other for explained variance, the PAD scale seems to fare better in situations that seem to involve relatively intense core affect, while the Plutchik and Izard scale do a better job in measuring emotions that are more cognitively mediated. Halvena and Holbrook (1986) compared the PAD scale with the scale of Plutchik (1980) in measuring consumption situations. Halvena and Holbrook (1986) let twenty research participants, recruited from a

⁴ The high cognitive component in the concept of “surprise” leads Ortony et al. (1988) to even consider “surprise” a cognitive state instead of an emotion, though others have disagreed and called surprise an emotion (for example, Ekman, 1992; Meyer, Reisenzein, & Schützwohl, 1997).

university and a church, describe “high emotional consumption situations”, which were later judged on the PAD and on the Plutchik scales by two different panels of students from the same university. These descriptions consisted of consumption situations in five categories: aesthetics (such as attending a concert), athletics, entertainment, dining, and hobbies. From the examples Havlena and Holbrook (1986) given in the appendix of their article⁵, we may suspect that the “high emotion” situations turned out to be situations containing “high arousal”, with possibly less long lasting cognitive reflection. Possibly for this higher arousal component and lower cognitive component in the emotional situations Havlena and Holbrook (1986) have tested, Havlena and Holbrook (1986) find the PAD scale has proven to be superior for measuring emotions. The PAD scale was better able to explain the emotions in the Plutchik scale than vice versa. Halvena and Holbrook (1986) found that, because arousal and dominance are poorly represented in the Plutchik scale “the PAD data seems to be richer, capturing more information about the emotional aspects of the experience descriptions” (Havlena & Holbrook, 1986, p. 399) when compared to the scale of Plutchik.

Machleit & Erodu (2000) on the other hand, find the Plutchik (and the Izard) scale superior over the PAD scale in terms of explained variance in situations where *shopping* experiences were examined. In addition, the first two scales managed to explain consumer satisfaction somewhat better. Machleit and Eroglu (2000) asked research subjects to reflect on real existing instances of shopping situations that these research subjects had just then experienced. Some of these shopping situations, such as shopping for groceries, were for the major part functional and assumedly evoked only a low degree of emotions. The authors remark that people in those situations might display a broader range of emotions compared to the consumption experiences examined by Havlena and Holbrook (1986). In addition, and

⁵ Namely a surprisingly good orchestra performance by laymen, a bad restaurant experience and a mountain climbing experience.

perhaps more importantly, we find that for these situations the arousal dimension might play a lesser role. Furthermore, perhaps because of the broader scope of shopping situations, these situations may be more cognitively mediated: for example Machleit and Erodu (2000) indicate that guilt over an expensive purchase can play a role in shopping situations. However, as our inquiry focuses on experience service offerings, we intend to keep more functional shopping situations as examined by Machleit and Erodu (2000) outside of our research project and focus on situations where arousal may often play an important part instead. The choice for the PAD scale then seems to become quite plausible, for even Machleit & Erodu (2000) agree with Havlena & Holbrook (1986) that arousal is not adequately represented in the Plutchik scale, while dominance is even lacking completely. Machleit & Erodu (2000) find the lack of arousal and dominance to apply for the Izard scale as well.

The assumption that the PAD paradigm is most suitable for measuring core affect over more cognitively mediated emotions seems to be confirmed by Havlena, Holbrook and Lehmann (1989) who find that the Plutchik scale is more capable of analyzing “emotion words”; pertaining to emotion language, while the PAD scale seems more suitable for analyzing emotional “deeds”, emotional situations, actual “experiences” (Havlena et al., 1989) which are closely related to the subject of our study. In addition to this, Holak & Havlena (1998) find when analyzing the emotion of nostalgia (an emotion that can be said to be highly cognitively mediated: one has to evaluate a past situation positively in order to experience this emotion) that although the PAD scale yields statistically significant results (positive pleasure and negative dominance play a part in nostalgia), the standard emotional profile (SEP), that is partly based on the Plutchik and Izard scales, is able to explain nostalgia in a more detailed way.

An indication that the PAD scale may be suitable for application within the subject-field of our research might be that the PAD scale is still frequently used for measuring emotions that are elicited by a particular environment that evokes strong (core affect) emotions in customers such as by a theme park or touristic shopping environment (as for example respectively in: Bigné, Andreu, & Gnoth, 2005; Yüksel, 2007). However, in these works, the “dominance” dimension is skipped, for among other reasons because according to Donovan & Rossiter (1982) this dimension is barely relevant in shopping situations.

§ 4 Dominance: To include or not to include?

This brings us to another issue concerning the PAD scale. This is the question whether or not dominance should be included in the PAD scale⁶. While Mehrabian and Russell (1974) include pleasure, arousal, and dominance in their scale, several authors have provided reasons to exclude dominance from the PAD scale. Russell (1980; 2003) and Russell & Pratt (1980) decide to skip dominance firstly since according to these authors dominance explained only a tiny fraction of the variance, and secondly because dominance can be considered more to be a cognitive dimension, an antecedent or consequence of an emotion, instead of an emotion per se. As a third reason for skipping dominance, Donovan & Rossiter (1982) found that dominance is barely relevant in shopping situations, because, besides the above mentioned reasons, some items in the scale for dominance loaded poorly for this dimension.

However, the above mentioned reasons for excluding dominance from the PAD scale might be refuted by the following arguments. With regard to the first argument by Russell (1980;

⁶ Perhaps oddly enough, with or without the inclusion of dominance, the name of the PAD scale remains unaltered in literature.

2003) and Russell & Pratt (1980) that dominance would explain only a tiny fraction of the variance in the PAD scale, the present authors would like to remark that Mehrabian (1996) found that the percentage of variance explained by dominance in everyday emotional situations is still 14 percent (versus 27 and 23 percent for pleasure and arousal respectively). This percentage can hardly be called a tiny fraction. With regard to the second argument by Russell (1980) and Russell & Pratt (1980) that dominance is more likely to be a cognitive dimension, the present authors would like to remark that although we tend to agree with Russell (1980; 2003) that dominance may have a cognitive component (for example, one may *think* certain behavior will not be tolerated, which may lead to a feeling of being restrained by one's environment), especially in experiences, dominance shows a component that is clearly little cognitively mediated and relates more to core affect. An example of this is the feeling a customer has when that customer is strapped up in a roller coaster (low dominance), or left free to explore a landscape (high dominance). These considerations provide us with an additional reason to include dominance in the scales we intend to use. With regard to the third argument for excluding dominance by Donovan & Rossiter (1982) who found that some elements in the scale of dominance barely load for this dimension, Yani-de-Soriano & Foxall (2006) point out that in order to make the PAD scale more suitable for retail situations, Donovan and Rossiter (1982) had inadequately replaced a couple of items on the scale for dominance, and that they were precisely those items that caused the poor loading.

On top of this, the dimension of dominance might be necessary to adequately describe particular kinds of emotions. For example, Holak & Havlena (1998) showed the emotion of nostalgia was significantly defined by the scale components of pleasure and *dominance* (and not arousal). Furthermore, Yani-de-Soriano & Foxall (2006) stress the significance for the inclusion of dominance in the PAD scale, because among other reasons it is to distinguish

between important emotions such as fear (low pleasure, high arousal, *low dominance*) and anger (low pleasure, high arousal, *high dominance*). In addition, the last mentioned authors remark that Morgan & Heise (1988) found that not two but three dimensions were necessary to adequately describe emotions. According to Morgan & Heise (1988) these dimensions are pleasure, arousal and potency: the latter being a “fight-flight” dimension that shows similarity with dominance.

When we turn our attention to the possible relevance of the inclusion of dominance in our field of investigation, experiences servicescapes, we encounter new motives for using the PAD scale – with the inclusion of dominance. In the history of experience-like offerings such as theme parks, issues that have appeared frequently concern the need to counterbalance aroused customers by operations trying to restrain the customer’s control over their environment, thus preventing these customers from possibly showing deviant behavior (Adams, 1991; Klugmann, Kuenz, Waldrep, & Willis, 1995; Ritzer, 1999). Furthermore, we may assume there might be a parallel between dominance experienced by a customer in an experience servicescape and actual active versus passive participation in that experience by that customer. According to Pine and Gilmore (1998, 1999) this degree of active participation in an experience by the customer is one of the key features by which one can distinguish experiences between each other. Finally, equally important for our research project might be that the PAD scale (Mehrabian, 1995; Mehrabian & Russell, 1974) as discussed above can help us to describe emotions in terms of components that correspond with elements in the service delivery system that often might be controlled relatively easily by the experience provider. For example, it seems that arousal can relatively easily be controlled by physically moving the customer at varying intensities, in, for example, a roller coaster. Dominance might be controlled by altering the level of choices the customer is allowed to make in the

servicescape, for example, by varying the level of control a customer has over the spin speed of a vehicle in which he or she is sitting in. The link between the components in the PAD scale with components in experience service delivery systems might make it easier to relate particular emotions to the way a servicescape has to be structured and organized in order to arouse these particular emotions in customers.

For all the reasons mentioned above, we find that when we are dealing with experiences, it is essential that arousal and dominance are included in the scales we use. Based on all previously mentioned reasons, the PAD scale, with the inclusion of dominance, is the scale that seems to be most adequate for our research project⁷.

However, based on the above discussion, we must realize that the PAD scale might be less adequate for analyzing experience offerings with a higher cognitive component, such as experiences built around emotions such as romance and nostalgia. As Russell & Feldman Barrett (1999) put it: “Examples of fear, anger, embarrassment, and disgust could share identical core affect and therefore fall in identical places in the circumplex structure [consisting of pleasure and arousal]. Thus, the pleasure and arousal dimensions and the circumplex represent one component of each prototypical emotional episode but not other components, and these other components are thus what would, in this example, differentiate among fear, anger, embarrassment, and disgust” (Russell & Feldman Barrett, 1999, p. 807) Russell & Feldman Barrett (1999) refer to the PAD scale without the inclusion of dominance; with dominance included as we intend, we will be able to distinguish more emotions from each other. Nevertheless, we must take into account that the PAD scale may fare less well in telling apart emotions that differ from each other with regard to their cognitive component.

⁷ We plan to explain our choice for the PAD paradigm even more elaborately in a forthcoming paper.

However, our initial priority remains with the PAD scale; among other reasons this is because the more direct link arousal and dominance might have with experience servicescape elements. As we have seen, pleasure and arousal are poorly represented -- to say the least -- on the Plutchik and Izard scales.

To summarize these last two sections:

The PAD scale, with the inclusion of dominance, is most adequate for measuring emotions in experiences because of the following:

- Its appropriateness to measure core affect; or “raw emotions*
- Its proposed link to aspects in an experience service delivery system.*

§ 5 Linking emotions with servicescapes: preliminary propositions

Using the PAD scale, we hope to find precise criteria for the comparison of experience service delivery systems in an explorative case study which will result in a separate paper. Tentatively, we will propose some propositions we attempt to explore.

We may assume that in an experience, the experience provider always wants its customers to feel positive about the environment of the experience servicescape. Given the way we have defined pleasure as “the degree of feeling positive about one’s environment” (p.10), we can assume the intended level of pleasure in the emotions that are being evoked by the experience provider is always high. For this reason, we are considering to focus on issues that relate to the interplay of arousal and dominance in the evoked emotions. As we have briefly pointed out in the last section, those issues are deemed important for experience-based offerings (Adams, 1991; Klugmann et al., 1995; Ritzer, 1999), and may include asking: to what degree should aroused guests, perhaps tending to deviant behavior, be controlled, and, partly related

to this, to what degree should processes be controlled, in order to “guarantee” customers a particular sort of experience?

To refine our model, we want to make a distinction between arousal and dominance evoked in the customer by cognitive versus physical means. By “cognitive means”, we include the telling of stories, addressing thoughts in the customer that in turn are expected to change the feeling of arousal or dominance in him or her, while by “physical means”, we include moving the customer on a roller coaster, addressing bodily sensations in the customer that in turn are expected to change the feeling of arousal or dominance in him or her. We assume different service delivery systems may be required depending on whether arousal or dominance is evoked in a more physical or more cognitive way.

In this paper, we limit ourselves to proposing propositions relating to the servicescape of an experience service delivery system, and elaborate propositions for one element of that servicescape: customer flows. Tentatively, we formulate the following propositions to be explored in a qualitative case study.

On the relationship between arousal and dominance:

Higher aroused customers may tend more to deviant behavior, for this reason we can advance the following proposition;

Proposition 1: When more arousal is invoked, a greater need will arise for decreasing dominance in the customer, either in a cognitive way (e.g., via rules) or physical way (e.g., via restraints).

Servicescape

In § 2 of this paper, based on Bitner (1992), Roth & Menor (2003), and Voss et al. (2008) we defined the servicescape/ stageware/ structure as consisting of :

- **Customer flows**

- **Process technology and equipment**

- **Facilities and layout**

- **Customer contact points**

We will now tentatively draw up propositions for the first aspect of the experience servicescape, customer flows.

On customer flows: customer flows relate to the different possible routings a customer can take through an experience servicescape. A customer flow can be rather homogeneous: it can offer customers few possibilities for alternative routings though a servicescape, such as is the case with the average Disney attraction, or instead be rather heterogeneous; it can offer a customer various choices regarding which path to take through an experience servicescape, such as is the case in the average museum.

Higher arousal has a tendency to make a customer more inclined towards deviant behavior; hence, for this reason, our next proposition becomes:

Proposition 2: All other things remaining equal, the degree of arousal imposed on customers in a particular servicescape tends to positively correlate with the degree of heterogeneity (degree of dispersion) of the customer flows in that servicescape.

Lower dominance imposed on customers might make their behavior more controlled, and for this reason it seems appropriate to posit the next proposition, which is:

Proposition 3: All other things remaining equal, lower dominance imposed on customers in a particular servicescape tends to negatively correlate with the degree of heterogeneity of customer flows in that servicescape.

In addition to this, lower dominance imposed in a physical way (such as by the use of restraint bars) may tend to control a customer's behavior in a less flexible, and therefore more rigid way compared to lower dominance imposed on customers in a cognitive way (e.g., via rules that are checked by surveillance personnel); for this reason our final proposition in this paper becomes:

Proposition 4: All other things remaining equal, customer flows will become more homogeneous when lower dominance is inflicted on customers in a physical way as compared to lower dominance imposed on customers in a more cognitive way.

In subsequent papers we intend to develop propositions on the other elements of the servicescape. These elements as indicated above are a) process technology and equipment, b) facilities and layout, and c) customer contact points. We also plan to develop some propositions on other elements of the service delivery system that servicescapes are part of. Each of the elements yields a number of propositions, which we will then test empirically, after we have disposed off the current four.

§6 CONCLUSION

In this paper we have attempted to draw on a number of theories from psychology and from business research which includes marketing, and operations management, in an effort to

identify aspects that are possibly relevant to the triggering or evoking of emotions in servicescapes, as a first step towards clarifying possible mechanisms underlying the evocation of emotions in customers who choose to experience what is on offer in servicescapes. In the process, we have also examined some of the many theories relating to the notion of emotion, which is possibly related to ‘experiences’ which is the thrust of this paper. These aspects are summarized in a number of propositions, which form a subset of a whole range of propositions. But, before we examine a wider set of propositions, it is appropriate to theoretically derive and explore them here, which is what we have attempted to do in this work.

The next step is to undertake an empirical study, initially as a multiple case study to refine the propositions. Thereafter, we plan to undertake an extensive empirical study with more propositions, using the survey methodology in which our respondents would all be customers, both males and females, of different age groups at different servicescapes in a number of countries. We also intend to do some assessments under controlled laboratory conditions.

In this way, we hope to arrive at general statements on the relationship between the types of emotions evoked in customers and the composition of the servicescape meant to arouse such emotions in customers. In this way we also hope to come up with practical, operational guidelines that may be of value to firms offering a range of experience servicescapes.

§7 References

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